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HANDBOOK
OF THE
EIGHTH
INTERNATIONAL
CONGRESS
OF APPLIED
CHEMISTRY



NEW YORK • 1912

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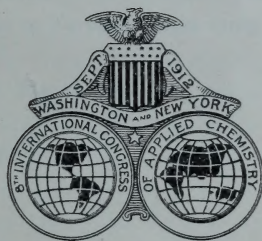
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HANDBOOK

of

CITY *of* NEW YORK

Prepared Especially for
Eighth International
Congress of Applied
Chemistry



September 4-13, 1912

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MARSHALS

For the assistance and help of attending members not familiar with Washington or New York, or others of the cities the Congress may visit, and more particularly for those attending members not familiar with the English language, this Congress has been so fortunate as to obtain the volunteer services of a considerable number of American chemists having good control of languages other than English, to advise, throughout the duration of the Congress, any of the attending members who may have need of such help.

These gentlemen will wear a red, white and blue ribbon attached to the badge; on the white vertical strip will be placed the letter or letters indicating the language other than English spoken by the Marshal wearing the ribbon. The key to this symbolism is as follows:

A.....	Danish
B.....	Dutch
C.....	Swedish
D.....	German
E.....	Spanish
F.....	French
G.....	Norwegian
H.....	Hungarian
I.....	Italian
K.....	Russian
L.....	Polish
M.....	Scandinavian
N.....	Japanese

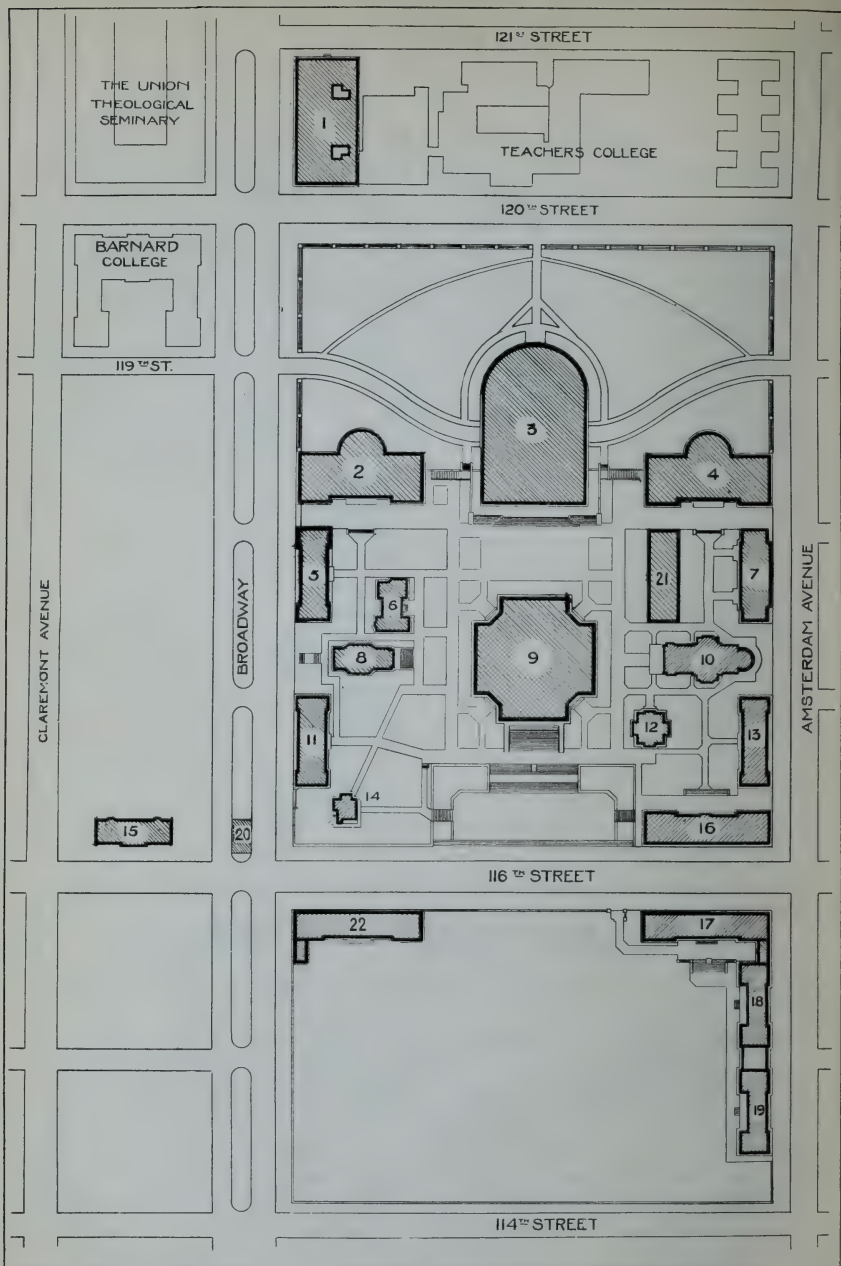
CONGRESS TELEPHONE SERVICE

Members who desire telephone information about or from the Congress can receive the same by calling the following telephone number: If the member desires to speak in English call "8920 Morningside"; if in French call "7999 Morningside"; if in German call "7895 Morningside," and if in Italian call "8125 Morningside." Those answering the last three telephone numbers on behalf of the Congress will speak the language above indicated; the first telephone call given, namely, "8920 Morningside," is for English conversation only with the Congress.

International Congress Applied Chemistry . .	Morningside 8920
Information Bureau, French	Morningside 7999
Information Bureau, German	Morningside 7895
Information Bureau, Italian	Morningside 8125

Members who may wish to call the Chemists' Club on the telephone can do so by asking for "1916 Murray Hill."

DIAGRAM OF COLUMBIA UNIVERSITY



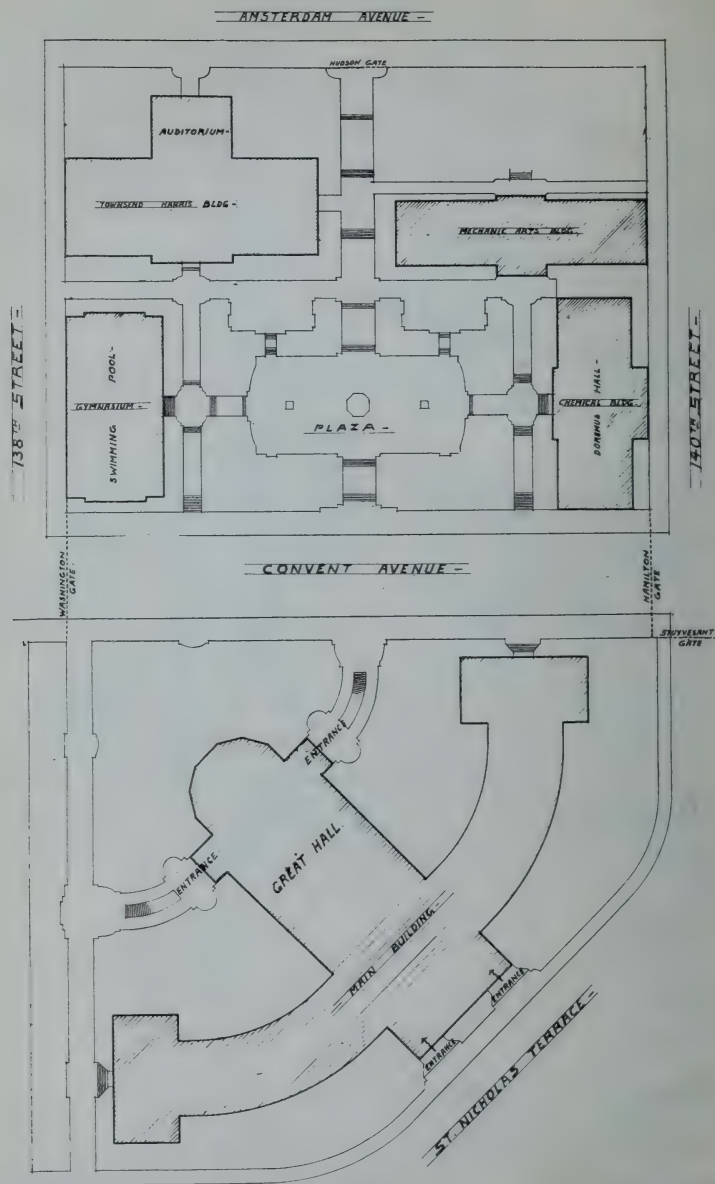
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|-----------------------------|---------------------------|--------------------------|
| 1. Horace Mann School | 9. Library | 16. Kent Hall |
| 2. Havemeyer | 10. St. Paul's Chapel | 17. Hamilton |
| 3. University and Gymnasium | 11. School of Mines | 18. Hartley Dormitory |
| 4. Schermerhorn | 12. East | 19. Livingston Dormitory |
| 5. Engineering | 13. Philosophy | 20. Subway Station |
| 6. West | 14. Faculty Club | 21. Avery |
| 7. Fayerweather | 15. Brooks Hall Dormitory | 22. School of Journalism |
| 8. Earl | | |

SHOPS IN THE NEIGHBORHOOD OF COLUMBIA UNIVERSITY

Brooks Hall Dormitory	University	
116th St.		116th St.
	Dormitories	Candy Store Tailor Lunch Room Wines Butcher Grocer
115th St.	South Field	115th St.
Druggist Dyeing and Cleaning Cigars Grocer Butcher	BROADWAY	Grocer Butcher Stationery Ladies' & Gent's Furnishings Boots & Shoes Lunch Room Laundry Delicatessen Barber Druggist
114th St.		114th St.
Druggist Millinery Dairy Rugs Grocer Wines Florist Cigars Dyeing and Cleaning Laundry	Garage Bank	
113th St.		113th St.

AMSTERDAM AVENUE

DIAGRAM OF COLLEGE OF THE CITY OF NEW YORK



NEW YORK—THE METROPOLIS

The City of New York is the most marvelous exemplification of those traits of the American people which have made the United States of to-day. Interest in New York does not lie in the mere magnitude of the city, but is found rather in the boundless enterprise, the bold conception and the amazing achievement, which have reared the mighty fabric of the Metropolis. The theme is one which might well challenge the pen of him who would celebrate the America of the beginning of the Twentieth Century.

In describing New York none other than the superlatives will suffice. It is in area the largest city in the world, and in population is exceeded only by one. The boroughs are linked together with the greatest of suspension bridges, and pierced throughout their length and breadth by the most extensive of subway systems. Broadway extending from the Battery north to Yonkers is the longest street in the world. The system of parks is the largest and costliest—in extent and in the sums devoted to maintain them unapproached in America or Europe. The gigantic office buildings of the business districts are among the modern wonders of the world; there are none to compare with them; their foundations are sunk deeper toward the center of the earth, their summits are uplifted higher toward the heavens. The largest steamships afloat make New York their port, and from the deck of the incoming ship the world-traveler beholds the towering bulk of Manhattan with amazement. The superb mansions of upper Fifth Avenue and Riverside Drive are among the most luxurious of the dwellings of man, as these streets are the grandest of residential avenues. The city's hotels and apartment houses are peerless in size and appointment; and each year witness their development, story added to story, luxury to luxury, magnificence to magnificence. The building operations characteristic of the day are audacious in their magnitude and in the engineering problems they involve.

The statistics which express the activities of the Metropolis are in figures which are incomprehensible. The Post Office handles an average of 10,000,000 pieces of mail matter every twenty-four hours, and the city contributes \$12,000,000 annually to the postal revenues. The surface cars carry 452,000,000 passengers in a year. On the floor of the New York Stock Exchange more than 3,000,000 shares of stock have changed hands in a single day. The banks of New York lead the world in volume of clearings. New York is the financial center of the world.

Great and surpassing as the city is, each year adds to its material greatness and commanding influence. Underground railroads, viaducts, bridges, tunnels, terminals, and piers; the Concourse of the Bronx to cost \$12,000,000, the \$4,000,000 Public Library on Fifth Avenue, the new Stock Exchange, Chamber of Commerce, Custom House and Hall of Records; the new Metropolitan Museum of Art, the Cathedral of St. John the Divine—this is to name only some of the more conspicuous features of the growing and expanding city of the present, the Metropolis of America, from which is emerging that city of the future which shall be the Metropolis of the World.

TRANSPORTATION

ELEVATED RAILROADS IN MANHATTAN.

Fare, Five Cents. Children under five years of age, free.

SECOND AVENUE LINE.

Stations.

South Ferry.	19th St. & 1st Ave.	86th St. & 2d Ave.
Hanover Square.	23d St. bet. 1st & 2d Ave.	92d St. & 2d Ave.
Fulton and Pearl Sts.	34th St. & 2d Ave.	99th St. & 2d Ave.
Franklin Square.	branch to 34th St.	111th St. & 2d Ave.
*Chatham Square.	Ferry, E. R.	117th St. & 2d Ave.
Canal & Allen Sts.	42d St. & 2d Ave.	121st St. & 2d Ave.
Grand & Allen Sts.	50th St. & 2d Ave.	127th St. & 2d Ave.
Rivington & Allen Sts.	57th St. & 2d Ave.	129th St. (see stations on 3d Ave.)
1st St. & 1st Ave.	65th St. & 2d Ave.	
8th St. & 1st Ave.	72d St. & 2d Ave.	
14th St. & 1st Ave.	80th St. & 2d Ave.	

*Transfer here for Third Avenue Line.

THIRD AVENUE LINE.

City Hall and South Ferry lines converge at Chatham Square.

Stations.

South Ferry.	42d St. & 3d Ave.	143d St.
Hanover Square.	branch to Grand Cen-	149th St. & 3d Ave.
Fulton & Pearl Sts.	tral Depot.	156th St. & 3d Ave.
Franklin Square.	47th St. & 3d Ave.	161st St. & 3d Ave.
City Hall.	53d St. and 3d Ave.	166th St. & 3d Ave.
*Chatham Square.	59th St. & 3d Ave.	169th St. & 3d Ave.
Canal & Bowery.	67th St. & 3d Ave.	Wendover & 3d Aves.
Grand & Bowery.	76th St. & 3d Ave.	174th St. & 3d Ave.
Houston and Bowery.	84th St. & 3d Ave.	177th St. & 3d Ave.
9th St. & 3d Ave.	89th St. & 3d Ave.	(Tremont.)
14th St. & 3d Ave.	99th St. & 3d Ave.	180th St. & 3d Ave.
18th St. & 3d Ave.	106th St. & 3d Ave.	183d St. & 3d Ave.
23d St. & 3d Ave.	116th St. and 3d Ave.	Pelham Ave. (Fordham)
28th St. & 3d Ave.	125th St. & 3d Ave.	Bronx Park.
34th St. & 3d Ave.	129th St. & 3d Ave.	
branch to 34th St.	133d St.	
Ferry, E. R.	138th St.	

*Transfer here for Second Avenue Line.

SIXTH AVENUE LINE.

Stations.

South Ferry.	28th St. & 6th Ave.	110th St., bet. 8th and
Battery Place.	33d St. & 6th Ave.	Columbus Aves.
Rector & Church Sts.	42d St. & 6th Ave.	116th St. & 8th Ave.
Cortlandt & Church.	*50th St. & 6th Ave.	125th St. and 8th Ave.
Park Pl. & Church St.	58th St. & 6th Ave.	130th St. & 8th Ave.
Chambers & W. B'way.	53d St. & 8th Ave.	135th St. & 8th Ave.
Franklin & W. B'way.	59th St. & 9th Ave.	140th St. & 8th Ave.
Grand & W. B'way.	66th St. & Columbus Av.	145th St. & 8th Ave.
Bleecker & W. B'way.	72d St. & Columbus Av.	155th St. & 8th Ave.
8th St. & 6th Ave.	81st St. & Columbus Av.	connects with N. Y. &
14th St. & 6th Ave.	93d St. & Columbus Av.	Putnam Railway.
18th St. & 6th Ave.	104th St. & Columbus Av.	
23d St. & 6th Ave.		

***Caution:** Some trains go through to 58th Street and Sixth Avenue terminus; on the others change for shuttle train to this station.

NINTH AVENUE LINE.

Stations.

South Ferry.	Franklin & Greenwich	30th St. & 9th Ave.
Battery Place.	Sts.	34th St. & 9th Ave.
Rector & Greenwich	Desbrosses & Green-	42d St. & 9th Ave.
Sts.	wich Sts.	50th St. & 9th Ave.
Cortlandt & Greenwich	Houston & Greenwich	59th St. & 9th Ave.
Sts.	Sts.	
Barclay & Greenwich	Christopher & Green-	Same stations as on
Sts.	wich Sts.	Sixth Avenue Line to
Warren & Greenwich	14th St. & 9th Ave.	155th St. and Eighth
Sts.	23d St. & 9th Ave.	Ave.

SUBWAY STATIONS.

*Express stations.

Main Line.

(1) Broadway Line.

*South Ferry.
 *Bowling Green.
 *Wall St. and Broadway.
 *Fulton St. and Broadway.
 City Hall (Loop), Broadway and Murray St.
 *Brooklyn Bridge, Park Row and Centre.
 Worth and Lafayette Sts.
 Canal and Lafayette Sts.
 Spring and Lafayette Sts.
 Bleecker and Lafayette Sts.
 Astor Place and Fourth Ave.
 *14th St. and Fourth Ave.
 18th St. and Fourth Ave.
 23d St. and Fourth Ave.
 28th St. and Fourth Ave.
 33d St. and Fourth Ave.
 *Grand Central Station—42d St. and Vanderbilt Ave.
 Times Square—42d St. and B'way.
 50th St. and Broadway.
 Columbus Circle—59th St. and Broadway.
 66th St. and Broadway.
 *72d St. Broadway.
 79th St. and Broadway.
 86th St. and Broadway.
 91st St. and Broadway.
 *96th St. and Broadway.

96th St. and Broadway.
 103d St. and Broadway.
 110th St. and Broadway.
 116th St. and Broadway.
 125th St. and Broadway, and Manhattan St.
 137th St. and Broadway.
 145th St. and Broadway.
 157th St. and Broadway.
 168th St. and Broadway.
 181st St. and 11th Ave.
 Dyckman St. and Naegle Ave.
 207th St. and Amsterdam Ave.
 215th St. and Broadway.
 225th St., Kingsbridge.
 231st St. and Broadway.
 238th St. and Broadway.
 242d St. and Broadway (Van Cortlandt Park).

(2) Lenox Avenue Line.

96th St. and Broadway.
 110th St. and Lenox Ave.
 116th St. and Lenox Ave.
 125th St. and Lenox Ave.
 135th St. and Lenox Ave.
 145th St. and Lenox Ave.

(3) Bronx Park and West Farms.

135th St. and Lenox Ave.
 149th St. and Mott Ave.
 149th St., Third, Melrose, & Willis Jackson and Westchester Aves.
 Prospect and Westchester Aves.
 Simpson St. and Southern Boulevard.
 Freeman St. & Southern Boulevard.
 174th St. and Boston Road.
 177th St. and Boston Road.
 Bronx Park.

The Main Line branches here into lines: (1) Broadway, (2) Lenox Ave.; and the latter again branches at 135th St. and Lenox Ave., forming: (3) Bronx Park and West Farms Line.

The West Farms express trains of the Subway run through to Brooklyn; the fare from any point in New York to any station in Brooklyn is 5 cents. The running time from City Hall, Manhattan, to Borough Hall, Brooklyn, is 11 minutes.

TAXICAB FARES.

Mileage Rates—

For first two-fifths of a mile..... \$0.50
 For each additional fifth mile..... .10
 For waiting, per hour..... 1.50

Hourly Rates—\$3.00 per hour for the first three hours, and \$2.00 per hour for each succeeding hour, but no call is taken for less than two hours at this rate.

HACK AND CAB FARES.

The legal rate of fare of which an official copy shall be furnished by the Bureau of Licenses, and carried by every licensed hackman, shall be as follows:

Mileage rates charged for general driving.

Cabs—

For one mile or any part thereof..... \$0.50
 For each additional half mile or part thereof..... .25
 For any stop over five minutes in a trip, for every fifteen minutes or fraction thereof..... .25

Coaches—

For one mile or any part thereof..... \$1.00
 For each additional half mile or part thereof..... .50
 For any stop over five minutes in a trip, for every fifteen minutes or fraction thereof..... .40

Hourly Rates.—These hourly rates, except by special agreement, are to apply only to shopping or calling, and shall not include park or road driving, nor driving for more than three miles from the starting point:

Cabs—For one hour or any part thereof, \$1.00; for each additional half hour or part thereof, 50c.

Coaches—For one hour or any part thereof, \$1.50; for each additional half hour or any part thereof, 75c.

Regulations.

Any vehicle kept for hire shall be deemed a public hack, and a vehicle intended to seat two persons inside shall be deemed a cab, and a vehicle intended to seat more than two persons inside shall be deemed a coach, and the term hackman shall be deemed to include owner or driver, or both.

Every licensed hackman, immediately after the termination of any hiring or employment, must carefully search such hack for any property lost or left therein, and any such property, unless sooner claimed or delivered to the owner, must be taken to the nearest police station and deposited with the officer in charge within twenty-four hours after the finding thereof; and in addition a written notice, with brief particulars and description of the property, must be forwarded at once to the Bureau of Licenses.

Every licensed hackman shall have the right to demand payment of the legal fare in advance, and may refuse employment unless so prepaid, but no licensed hackman shall otherwise refuse or neglect to convey any orderly person or persons, upon request, anywhere in the city, unless previously engaged or unable so to do. No licensed hackman shall carry any other person than the passenger first employing a hack without the consent of said passenger.

Twenty blocks north and south to constitute a mile; seven blocks between the numbered and lettered avenues will be deemed a mile, as from Avenue B to Sixth Avenue or from Second Avenue to Ninth Avenue.

No owner or driver of any taxicab which seeks patrons on the streets, avenues or highways of the City of New York, or occupies space thereon by reason of a permit or license from the City of New York, shall exact any fare from a passenger greater than that set forth in the official schedule of rates above provided.

Disputes as to rates and distances may be settled by the police, or complaints may be made to the Bureau of Licenses, Boroughs of Manhattan and the Bronx, City Hall, New York.

TUNNELS AND TERMINALS.

MANHATTAN—BROOKLYN.

1. The **Manhattan-Brooklyn Tunnel** is an extension of the Rapid Transit Railroad subway system under the East River to the foot of Joralemon street; thence to Fulton street and Flatbush avenue and to the junction of Flatbush and Atlantic avenues, where is the station of the Long Island Railroad. The tunnel was opened in January, 1908, to the Borough Hall station. Under the river the construction consists of two cast-iron tubes, inside diameter 15 feet 6 inches, length 6,790 feet. Trains pass to Brooklyn through the south tube and return through the north tube. The grade is 3.1 per 100 feet, the descent and ascent of the train being scarcely perceptible. The tunnel is everywhere below water level, until it rises at a point 700 feet before reaching the Borough Hall station. It passes through rock (two stretches of 2,700 feet and 400 feet) and sand, clay and gravel formations. The lowest point reached by the tunnel is 94 feet below mean high water. Certain portions which pass through sand are given added strength by concrete piles sunk to bedrock, at depths varying from 5 to 75 feet. The motive power is electricity, by the third-rail system. The tunnel was constructed by the builders of the Rapid Transit Railroad, whose bid for the tunnel and terminals was \$3,000,000. The actual cost exceeded \$10,000,000. The tunnel will be operated by the constructing company for a term of thirty-five years, when it is to revert to the city, under conditions similar to those which control in the Rapid Transit Railroad contract.

NEW YORK—NEW JERSEY.

2. **Hudson & Manhattan R. R. Co.** The **Hudson River Tubes** consist of two pair of tunnels passing under the Hudson River and connecting New Jersey with New York, the downtown terminus being at Church and Cortlandt Streets (Terminal Buildings), and the uptown at 33d Street and 6th Avenue.

The tunnels are tubes constructed of steel rings overlaid with concrete. In each tunnel there is a separate tube for each track; ventilation is secured by the action of the train which forces the air ahead of it. The tubes are 15 feet in interior diameter. They lie about 30 feet apart and are from 60 to 90 feet below the surface of the Hudson, the depth of earth between the tunnel and the water ranging from 15 to 40 feet. The deepest part is on the New York side. In Jersey City the center of the system is the terminal station, hewn out of the solid rock, 85 feet below the Pennsylvania Railroad train shed, and reached from the Pennsylvania terminal by elevators.

HUDSON & MANHATTAN R. R.

Stations in New York.

Uptown.

33d St. and 6th Ave.
28th St. and 6th Ave.
23d St. and 6th Ave.
19th St. and 6th Ave.
14th St. and 6th Ave.
9th St. and 6th Ave.
Christopher and Greenwich Sts.

Downtown.

Terminal Buildings,
Church St. between Cortlandt and
Fulton Sts.

Stations in New Jersey.

Lackawanna R. R. Station (Hoboken).
Erie R. R. Station (Jersey City).
Pennsylvania and Lehigh Valley R. R. Stations (Jersey City).
Grove-Henderson Sts. (Jersey City).
Summit Ave. (Jersey City).
Manhattan Transfer (connection with Penn. R.R. to and from New York).
Park Place (Newark).

The first five stations in New Jersey can be reached by trains from Uptown and Downtown New York. Trains for Newark run from Terminal Building, and at Grove-Henderson Station connect with trains to and from Uptown New York and Lackawanna and Erie R. R. stations.

Fare between Jersey City and Hoboken stations and Uptown New York, 7 cents; Downtown New York, 5 cents.

3. **The Belmont Tunnels** from the foot of East 42d Street to Long Island City, the two tubes there looping and connecting with surface lines in Queens County.

4. **The Pennsylvania Railroad Tunnels** under the Hudson River; and their connections, the Long Island Railroad tunnels under the East River, forming parts of the great Pennsylvania terminal.

PRINCIPAL BRIDGES.

(Alphabetical order.)

BROOKLYN BRIDGE.—The Brooklyn Bridge, which spans the East River, connecting the boroughs of Manhattan and Brooklyn, has its Manhattan terminal in **City Hall Park**. The bridge was begun in 1870 and opened for traffic in 1883, having consumed 13 years in building and cost \$15,000,000. It is the third largest suspension bridge in existence, and is one of the wonders of the world. The bridge was designed by John A. Roebling. While engaged in the preliminary work he met his death. He was succeeded by his son, who in turn was injured by a fire, and became a permanent invalid. From his residence on the heights of Brooklyn, he watched the details of construction from his window by the aid of a telescope, and assisted by his wife directed the progress of the work to its successful completion. The channel span is 1,505 feet; each land span 930 feet; the Manhattan approach is 1,562 feet, and the Brooklyn approach 971 feet; the total length of the bridge is 6,537 feet. The cables are 15¾ inches in diameter and 3,578 feet in length. Each cable consists of 5,296 oil-coated wires. Subsequent alterations made the total cost of the bridge \$21,000,000.

MANHATTAN BRIDGE.—This is a suspension bridge and is located about a quarter of a mile to the east of the Brooklyn Bridge. The length of the main span is 1,470 feet; the side spans are each 725 feet; and the total length of the bridge, including the approaches, is 6,855 feet. Construction work was commenced in 1901 and was completed early in 1910. The cables are 21¾ inches in diameter; the carrying capacity is double that of the Brooklyn Bridge; the cost was \$16,000,000.

QUEENSBORO BRIDGE.—This bridge, extending over the East River at 59th Street to Ravenswood, Borough of Queens, was opened for public use in 1909. It is notable as being the heaviest steel bridge ever erected, surpassing the great cantilever bridge across the Firth of Forth, Scotland. The total length of the bridge, including approaches, is 8,600 feet. It contains 52,000 tons of steel, and was built by the overhang system. Seven years were required to build it, and the total cost was \$20,000,000.

WASHINGTON BRIDGE.—The Washington Bridge, just north of High Bridge, at West 181st Street, is an imposing structure of steel, iron and granite. It is 2,384 feet in length, and 80 feet wide; the two central arches have a span of 510 feet each, and their crowns are 135 feet above the river. The cost was nearly \$2,700,000. The view from the bridge to the north is toward Kingsbridge; on the west are Washington Heights and Fort George.

WILLIAMSBURG BRIDGE.—This is the largest span suspension bridge in the world. The bridge spans the East River from Delancy Street, Manhattan, to South Fifth and South Sixth Streets, Brooklyn. The total length is 7,200 feet and width 118 feet. The channel span is 1,600 feet, a height of 135 feet at the centre, and towers 335 feet. The diameter of the suspension cables is 18 $\frac{3}{4}$ inches. The bridge was begun in 1896 and opened in December, 1903. The cost was \$12,000,000.

RAILROAD STATIONS.

Crosstown car lines from and to all railroad stations on the North River connect with lines for up or down town, and in most cases free transfers are given.

Baltimore & Ohio—Liberty St. West 23d St.

Central of New Jersey—Liberty St. West 23d St.

In summer Sandy Hook boats from Cedar St. and West 42d St.

Erie—Chambers. West 23d St. Also Hudson Tubes.

Grand Central Station—42d St. and Fourth Ave.

Harlem—Grand Central Station. Also Fourth Ave., 86th, 110th, 125th, 138th, 183d.

Lackawanna—Barclay. Christopher St. West 23d St. Also Hudson Tubes.

Lehigh Valley—Cortlandt St. Desbrosses St. West 23d St. Also Hudson Tubes.

Long Branch—(Central of New Jersey, and Pennsylvania.)

Long Island—Pennsylvania Terminal. W. 32d St. East 34th St. Ferry.

New England—Grand Central Station.

New Haven—Grand Central Station.

New Haven (Harlem River Branch)—Willis Ave. and 130th St.

N. Y. & Putnam—155th St., terminus of Sixth Ave. elevated.

N. Y., N. H. & Hartford—Grand Central Station.

N. Y. Central—Grand Central Station. Also East 125th and 138th Sts. Spuyten Duyvil Branch—10th Ave. and 30th St.

N. Y., Susquehanna & Western—Chambers St. West 23d St. Also Hudson Tubes.

Northern of New Jersey—Chambers St. West 23d St. Also Hudson Tubes.

Ontario & Western—Cortlandt St. West 42d St.

Pennsylvania—Pennsylvania Station, 7th Ave., West 31st to 33rd Sts. Cortlandt St. Desbrosses St. West 23d St. Also Hudson Tubes.

Philadelphia & Reading—Liberty St. West 23d St.

Staten Island—South Ferry, foot of Whitehall St.

West Shore—Cortlandt St. West 42d St.

HUDSON RIVER STEAMBOAT LINES.

Albany Night Line (People's)—Canal St. Pier 32.

Catskill Evening Line—Christopher St.

Central Hudson Line—Franklin St. and West 129th St.

Hudson River Day Line—Desbrosses, West 42d and West 129th Sts.

Mary Powell—Desbrosses, West 42d and West 129th Sts.

Saugerties Line—Christopher St.

Troy (Citizens') Line—Canal St.

AROUND MANHATTAN ISLAND.

Sight-Seeing Yachts—West 23d St., West 42d St., East 24th St.

SOUND BOATS.

Boston (Fall River Line)—Pier 19, Warren St., N. R.
Bridgeport Line—Pier 27, E. R.
Fall River Line—Pier 19, Warren St., N. R.
Hartford Line—Peck Slip.
New Bedford Line—Pier 40, N. R.
New Haven Line—Pier 28, E. R.
New London—Pier 40, N. R.
Newport (Fall River Line)—Warren St., N. R.
Norwich (Chelsea Line)—Roosevelt St., E. R.
Providence Line—Murray St.; Pier 18, N. R.
Providence (Joy Line)—Pier 19, E. R. Peck Slip.

ATLANTIC HIGHLANDS.

Sandy Hook Route—Cedar St. and West 42d St.

CONEY ISLAND, New York's famous seaside resort, may be reached by trolley or elevated road from the Brooklyn Bridge; Manhattan Beach Railway from East 34th St.; and in season by the Iron Steamboats from West 129th St. and Pier 1, at the Battery.

ROCKAWAY BEACH is reached by the elevated line from the Brooklyn Bridge, or by excursion steamers from West 129th St. and Pier 1, at the Battery.

COASTWISE STEAMSHIP LINES.

(Offices are given in parenthesis.)

Atlas—For West Indies and Mosquito Coast—Pier 55, N. R.; West 25th St. (45 Broadway).
Clyde—For Charleston and Jacksonville—Pier 36, foot Spring St., N. R. (Pier and 290 Broadway).
Lamport & Holt Line—West Indies, South America—Robert's Stores, Brooklyn. (Produce Exchange).
Maine S. S. Line—For Portland—Pier 15, N. R. (290 Broadway).
Mallory—For Galveston, Tampa, Key West, Mobile—Piers 38 and 45, N. R. (Office on Pier.)
Metropolitan—For Boston—Pier 14, N. R. (290 Broadway).
Morgan—For New Orleans—Pier 48, N. R. (366 Broadway).
Munson Line—For Cuba—Pier 8, E. R. (82 Beaver St.)
Old Dominion—For Norfolk, Richmond, Fort Monroe, Washington—N. Moore St. (On pier.)
Panama—For Isthmus of Panama—Pier 67, N. R.; West 27th St. (24 State St.)
Porto Rico—For Porto Rico—Brooklyn. (11 Broadway).
Quebec S. S. Co.—For Bermuda—Foot West 10th St. (29 Broadway).
Red Cross—For Halifax and St. John's—Pier B, Erie Basin, Brooklyn. (17 Battery Pl.)
Red D—For Porto Rico and Venezuela—Pier 11, Brooklyn. (82 Wall St.)
Royal Dutch West Indies—For Port au Prince—Bush Docks, Brooklyn. (17 State St.)
Royal Mail S. S. Co.—West Indies—Pier 42, N. R. (22 State St.)
Savannah—For Savannah—Pier 35, N. R.; Spring St. (On pier and 501 Fifth Ave.)
Ward—For Nassau, Cuba and Mexico—Piers 13-14, E. R. (Office on pier.)
United Fruit Co.—For Jamaica, Panama, Honduras, Colombia, S. A.—Pier 16, E. R. (17 Battery Pl.)

TRANSATLANTIC STEAMSHIP LINES.

(Offices are given in parenthesis.)

American (9 Broadway)—Pier 62, N. R.
Anchor (19 Broadway)—Pier 64, N. R.
Atlantic Transport Line (9 Broadway)—Pier 58, N. R.
Cunard (24 State St.)—Piers 54-56, N. R.
Fabre Line—Mediterranean Service—Pier foot of 31st St., Brooklyn.
French Line (19 State St.)—New Piers 57 and 84, N. R.
Hamburg-American (45 Broadway)—Hoboken, N. J.
Holland-America (39 Broadway)—Hoboken, N. J.
National Transport Line—For London—(1 Broadway)—Pier 39, N. R.
North German Lloyd (5 Broadway)—Hoboken, N. J.
Red Star (9 Broadway)—Pier 61, N. R.
Scandinavian-American—(1 Broadway)—Hoboken, N. J.
White Star (9 Broadway)—Piers 59-61, N. R.
Wilson (22 State St.)—Seventh St., Hoboken.

PIERS IN MANHATTAN.

NORTH RIVER.

Pier No.	Street.	Pier No.	Street.
A, New 1 Battery Pl.		40 Clarkson.	
A, Old 1 Battery Pl.		41 Leroy.	
2 & 3 Battery Pl. & Morris.		42 Morton.	
4 Morris.		43 Barrow.	
5 & 7 Morris & Rector.		44 Christopher.	
8 Rector.		45 W. 10th.	
9 & 10 Rector & Carlisle.		46 Charles.	
		47 Perry.	
		48 W. 11th.	
		49 foot Bank.	
New 10 Albany.		50 Bethune & W. 12th.	
Old 11 Carlisle.			
New 11 Cedar.		51 Jane.	
13 Cortlandt & Dey.		52 Gansevoort.	
14 Fulton.	New 54 W. 13th.	53 Bloomfield.	
15 Vesey & Barclay.	Old 54 W. 24th.		
Old 16 Liberty & Cortlandt.	Old 55 W. 25th.		
New 16 Barclay & Park Place.	New 56 W. 14th.		
	Old 56 W. 26th.		
17 Park Pl.	Old 56½ Gansevoort & Bloomfield.		
18 Murray.	New 57 W. 15th.		
19 Warren.	Old 57 W. 27th.		
20 Chambers.	New 58 W. 16th.		
21 Duane.	Old 58 W. 28th.		
22 Jay.	New 59 W. 18th.		
23 Harrison.	Old 59 W. 29th.		
24 Franklin.	60 W. 19th.		
25 North Moore.	61 W. 21st.		
26 Beach.	62 W. 22d.		
27 Hubert.	Old 64 W. 34th.		
28 Laight.	New 64 W. 24th.		
29 Vestry.	New 65 W. 25th.		
30 Desbrosses.	New 66 W. 26th.		
31 Watts.	Old 67 W. 37th.		
32, 33, 34 Canal.	New 67 W. 27th.		
35 Spring.	New 68 W. 28th.		
36 Spring & Charlton.	New 69 W. 29th.		
37 Charlton.	71 W. 31st.		
38 King.	72 W. 32d.		
39 W. Houston.	73 W. 33d.		
	74 W. 34th.		

NORTH RIVER.

Pier No.	Street.	Pier No.	Street.
75 W. 35th.		84 W. 44th.	
76 W. 36th.		85 W. 45th.	
77 W. 37th.		86 W. 46th.	
78 W. 38th.		87 W. 47th.	
79 W. 39th.		88 W. 48th.	
80 W. 40th.	New 89 W. 49th.		
81 W. 41st.	Old 89 W. 59th.		
83 W. 43d.	91 W. 51st.		

EAST RIVER.

4 Broad.	30 Pike & Mark't.
5, 6, 7, 8 Coenties Slip.	31 & 32 Pike.
9 Coenties & Old Slip.	33 Pike & Rutgers.
10 Old Slip.	34 Rutgers.
11 Gouvern'r La.	36 Jefferson.
12 Wall.	37 Clinton.
13 Wall.	38 Clinton & Montgomery.
14 Maiden Lane.	39, 40 Montgomery.
15 Fletcher & Burling Sl.	41, 42 Gouverneur.
16 Burling Slip.	45 Rutgers & Jefferson.
17 Fulton.	46 Jefferson.
18 Beekman.	49 Clinton & Montgomery.
19 Peck Slip.	50 Montgomery.
20 Peck Slip.	53 & 54 Jackson.
21 Dover.	55 Cherry.
Old 22 Roosevelt.	60 Rivington.
New 22 James Slip.	61 Rivington & Stanton.
26 & 27 Catharine	62 Stanton.
Old 28 Dover & Roosevelt.	66 E. 18th.
New 28 Catharine & Market.	67 E. 19th.
29 Market.	70 E. 22d.

RECREATION PIERS.

Foot of Market & Pike.	Foot of W. 50th.
Foot of E. 3d.	Foot of W. 129th.
Foot of E. 24th.	Foot of Whitehall.
Foot of E. 112th.	Foot of Albany.
Foot of Barrow.	

THEATRES AND AMUSEMENT PLACES

For information in regard to these see daily papers.

STREET DIRECTORY

CROSS STREET CORNER NUMBERS ON BROADWAY AND THE AVENUES, NEW YORK CITY.

BROADWAY.

1 Battery Pl.	303 Duane.	727 Wav'ly Pl.	1203 W. 29th.	1649 W. 51st.	3236 W. 130th.
8 Beaver.	317 Thomas	744 Astor Pl.	1227 W. 30th.	1665 W. 52d.	3399 W. 135th.
27 Morris.	318 Pearl.	755 E. 8th.	1251 W. 31st.	1687 W. 53d.	3435 W. 140th.
55 Exch. Pl.	334 Worth.	770 E. 9th.	1273 W. 32d.	1709 W. 54th.	3539 W. 145th.
56 Exch. Pl.	344 Catharine	784 E. 10th.	1291 W. 33d.	1727 W. 55th.	3639 W. 150th.
73 Rector.	Lane.	801 E. 11th.	Sixth Av.	1745 W. 56th.	3699 W. 153d.
86 Wall.	348 Leonard.	824 E. 12th.	1311 W. 34th.	1769 W. 57th.	Trinity Cem.
106 Pine.	362 Franklin.	840 E. 13th.	1329 W. 35th.	1787 W. 58th.	3741 W. 155th.
114 Thames.	378 White.	858 E. 14th.	1349 W. 36th.	1805 W. 59th.	3818 W. 159th.
124 Cedar.	398 Walker.	Union Square.	1369 W. 37th.	Central Park.	Ft. Wash'n Av.
145 Liberty.	413 Lispenard.	857 E. 17th.	1391 W. 38th.	1939 W. 64th.	3834 W. 160th.
171 Cortlandt.	416 Canal.	871 E. 18th.	1409 W. 39th.	2035 W. 70th.	3936 W. 165th.
172 Maiden L.	432 Howard.	887 E. 19th.	1429 W. 40th.	2137 W. 75th.	4054 W. 171st.
184 John.	458 Grand.	901 E. 20th.	1447 W. 41st.	2239 W. 80th.	4138 W. 175th.
191 Dey.	486 Broome.	919 E. 21st.	1467 W. 42d.	2339 W. 85th.	4236 W. 180th.
210 Fulton.	526 Spring.	939 E. 22d.	1489 W. 43d.	2436 W. 90th.	4341 W. 185th.
222 Ann.	566 Prince.	957 E. 23d.	1505 W. 44th.	2536 W. 95th.	4634 Sherman
Vesey.	608 Houston.	957 Fifth Av.	1525 W. 45th.	2639 W. 100th.	Av.
227 Barclay.	640 Bleecker.	Madison Sq.	Seventh Av.	2737 W. 105th.	5100 W. 219th.
237 Park Pl.	658 Bond.	1099 W. 24th.	1549 W. 46th.	2837 W. 110th.	5189 W. 225th.
247 Murray.	681 W. 3d.	1119 W. 25th.	1569 W. 47th.	3078 W. 122d.	5241 W. 228th.
259 Warren.	682 Gt. Jones.	1139 W. 26th.	1589 W. 48th.	3137 W. 125th.	Spuyten Duyvil
271 Chambers.	694 Fourth.	1159 W. 27th.	1609 W. 49th.	3203 Manhat'n.	Creek.
287 Reade.	713 Wash'n Pl.	1183 W. 28th.	1629 W. 50th.		

FIFTH AVENUE.

1 Wash. Sq.	231 27th.	575 47th.	846 66th.	1048 86th.	1239 105th.
7 E. 8th.	249 28th.	593 48th.	856 67th.	1059 87th.	1249 106th.
21 9th.	263 29th.	609 49th.	869 68th.	1069 88th.	1259 107th.
33 10th.	281 30th.	623 50th.	879 69th.	1079 89th.	1269 108th.
41 11th.	299 31st.	637 51st.	884 70th.	1089 90th.	1279 109th.
51 12th.	315 32d.	653 52d.	899 71st.	1099 91st.	1286 110th.
61 13th.	331 33d.	671 53d.	908 72d.	1109 92d.	1319 111th.
67 14th.	353 34th.	685 54th.	919 73d.	1116 93d.	1335 112th.
96 15th.	371 35th.	703 55th.	927 74th.	1129 94th.	1355 113th.
81 16th.	387 36th.	719 56th.	939 75th.	1139 95th.	1371 114th.
95 17th.	405 37th.	737 57th.	949 76th.	1149 96th.	1399 115th.
107 18th.	421 38th.	751 58th.	959 77th.	1159 97th.	1415 116th.
115 19th.	439 39th.	775 59th.	969 78th.	1169 98th.	1422 117th.
133 20th.	457 40th.	Cent. Pk. S.	979 79th.	1179 99th.	1500 120th.
147 21st.	477 41st.	787 60th.	989 80th.	1189 100th.	2000 124th.
165 22d.	449 42d.	799 61st.	999 81st.	1199 101st.	2116 130th.
185 23d.	511 43d.	807 62d.	1009 82d.	1209 102d.	2192 134th.
Broadway.	529 44th.	817 63d.	1019 83d.	1219 103d.	2250 137th.
25th.	545 45th.	827 64th.	1029 84th.	1229 104th.	2321 140th.
214 26th.	561 46th.	837 65th.	1038 85th.		

THIRD AVENUE.

19 St. Mark's	391 E. 28th.	793 E. 49th.	1201 E. 70th.	1615 E. 91st.	2039 E. 112th.
Pl.	411 E. 29th.	813 E. 50th.	1229 E. 71st.	1643 E. 92d.	2063 E. 113th.
28 E. 9th.	429 E. 30th.	835 E. 51st.	1245 E. 72d.	1659 E. 93d.	2082 E. 114th.
45 E. 10th.	449 E. 31st.	857 E. 52d.	1265 E. 73d.	1677 E. 94th.	2110 E. 115th.
63 E. 11th.	467 E. 32d.	875 E. 53d.	1289 E. 74th.	1693 E. 95th.	2123 E. 116th.
83 E. 12th.	487 E. 33d.	895 E. 54th.	1309 E. 75th.	1709 E. 96th.	2141 E. 117th.
103 E. 13th.	505 E. 34th.	913 E. 55th.	1329 E. 76th.	1749 E. 97th.	2161 E. 118th.
123 E. 14th.	523 E. 35th.	933 E. 56th.	1349 E. 77th.	1765 E. 98th.	2181 E. 119th.
145 E. 15th.	541 E. 36th.	951 E. 57th.	1371 E. 78th.	1781 E. 99th.	2199 E. 120th.
165 E. 16th.	557 E. 37th.	969 E. 58th.	1389 E. 79th.	1800 E. 100th.	2227 E. 121st.
185 E. 17th.	577 E. 38th.	989 E. 59th.	1409 E. 80th.	1816 E. 101st.	2241 E. 122d.
203 E. 18th.	597 E. 39th.	1009 E. 60th.	1433 E. 81st.	1843 E. 102d.	2261 E. 123d.
223 E. 19th.	617 E. 40th.	1029 E. 61st.	1451 E. 82d.	1861 E. 103d.	2281 E. 124th.
243 E. 20th.	635 E. 41st.	1047 E. 62d.	1469 E. 83d.	1881 E. 104th.	2297 E. 125th.
261 E. 21st.	657 E. 42d.	1069 E. 63d.	1487 E. 84th.	1897 E. 105th.	2319 E. 126th.
281 E. 22d.	679 E. 43d.	1089 E. 64th.	1505 E. 85th.	1923 E. 106th.	2339 E. 127th.
299 E. 23d.	699 E. 44th.	1109 E. 65th.	1525 E. 86th.	1939 E. 107th.	2359 E. 128th.
319 E. 24th.	719 E. 45th.	1129 E. 66th.	1545 E. 87th.	1965 E. 108th.	2380 E. 129th.
337 E. 25th.	739 E. 46th.	1148 E. 67th.	1565 E. 88th.	1981 E. 109th.	2369 E. 130th.
355 E. 26th.	755 E. 47th.	1163 E. 68th.	1583 E. 89th.	2001 E. 110th.	Harlem River.
373 E. 27th.	773 E. 48th.	1185 E. 69th.	1599 E. 90th.	2027 E. 111th.	

LEXINGTON AVENUE.

1 E. 21st.	331 E. 39th.	695 E. 57th.	1055 E. 75th.	1423 E. 93d.	1869 E. 116th.
9 E. 22d.	353 E. 40th.	721 E. 58th.	1071 E. 76th.	1443 E. 94th.	1877 E. 117th.
17 E. 23d.	373 E. 41st.	741 E. 59th.	1097 E. 77th.	1469 E. 95th.	1895 E. 118th.
39 E. 24th.	389 E. 42d.	751 E. 60th.	1115 E. 78th.	1517 E. 98th.	1915 E. 119th.
59 E. 25th.	413 E. 43d.	781 E. 61st.	1135 E. 79th.	1613 E. 102d.	1944 E. 120th.
77 E. 26th.	435 E. 44th.	801 E. 62d.	1159 E. 80th.	1629 E. 103d.	1980 E. 121st.
97 E. 27th.	449 E. 45th.	821 E. 63d.	1187 E. 81st.	1645 E. 104th.	2001 E. 122d.
115 E. 28th.	473 E. 46th.	835 E. 64th.	1209 E. 82d.	1673 E. 105th.	2025 E. 123d.
135 E. 29th.	491 E. 47th.	863 E. 65th.	1225 E. 83d.	1689 E. 106th.	2034 E. 124th.
159 E. 30th.	513 E. 48th.	881 E. 66th.	1234 E. 84th.	1705 E. 107th.	2060 E. 125th.
177 E. 31st.	537 E. 49th.	901 E. 67th.	1259 E. 85th.	1733 E. 108th.	2085 E. 126th.
197 E. 32d.	555 E. 50th.	921 E. 68th.	1275 E. 86th.	1755 E. 109th.	2102 E. 127th.
217 E. 33d.	571 E. 51st.	941 E. 69th.	1291 E. 87th.	1773 E. 110th.	2125 E. 128th.
237 E. 34th.	593 E. 52d.	961 E. 70th.	1309 E. 88th.	1787 E. 111th.	2143 E. 129th.
253 E. 35th.	615 E. 53d.	983 E. 71st.	1339 E. 89th.	1801 E. 112th.	2168 E. 130th.
271 E. 36th.	635 E. 54th.	995 E. 72d.	1360 E. 90th.	1813 E. 113th.	E. 131st.
293 E. 37th.	655 E. 55th.	1017 E. 73d.	1378 E. 91st.	1841 E. 144th.	Harlem River.
311 E. 38th.	675 E. 56th.	1031 E. 74th.	1401 E. 92d.	1856 E. 115th.	

FOURTH AVENUE.

Astor Place	91 E. 11th.	Union Sq.	299 E. 23d.	384 E. 27th.	440 E. 30th.
E. 8th.	111 E. 12th.	250 E. 20th.	322 E. 24th.	402 E. 28th.	460 E. 31st.
58 E. 9th.	135 E. 13th.	265 E. 21st.	342 E. 25th.	422 E. 29th.	478 E. 32d.
73 E. 10th.	157 E. 14th.	283 E. 22d.	360 E. 26th.		

PARK AVENUE.

1 E. 34th.	413 E. 55th.	757 E. 72d.	1091 E. 89th.	1408 E. 105th.	1737 E. 121st.
18 E. 35th.	433 E. 56th.	779 E. 73d.	1115 E. 90th.	1424 E. 106th.	1755 E. 122d.
37 E. 36th.	455 E. 57th.	795 E. 74th.	1135 E. 91st.	1455 E. 107th.	E. 123d.
47 E. 37th.	479 E. 58th.	819 E. 75th.	1155 E. 92d.	1475 E. 108th.	1796 E. 124th.
65 E. 38th.	497 E. 59th.	833 E. 76th.	1177 E. 93d.	1489 E. 109th.	1817 E. 125th.
79 E. 39th.	513 E. 60th.	E. 77th.	1197 E. 94th.	1507 E. 110th.	1837 E. 126th.
99 E. 40th.	525 E. 61st.	879 E. 78th.	1217 E. 95th.	1526 E. 111th.	1851 E. 127th.
115 E. 41st.	549 E. 62d.	885 E. 79th.	1236 E. 96th.	1555 E. 112th.	1875 E. 128th.
135 E. 42d.	573 E. 63d.	911 E. 80th.	1253 E. 97th.	1571 E. 113th.	1895 E. 129th.
R. R. Yard.	593 E. 64th.	935 E. 81st.	1269 E. 98th.	1590 E. 114th.	1915 E. 130th.
E. 48th.	607 E. 65th.	957 E. 82d.	E. 90th.	1617 E. 115th.	1937 E. 131st.
E. 49th.	637 E. 66th.	979 E. 83d.	1316 E. 100th.	1635 E. 116th.	1957 E. 132d.
E. 50th.	650 E. 67th.	997 E. 84th.	1336 E. 101st.	1649 E. 117th.	1978 E. 133d.
E. 51st.	E. 68th.	1015 E. 85th.	1353 E. 102d.	1673 E. 118th.	E. 134th.
E. 52d.	692 E. 69th.	1037 E. 86th.	E. 103d.	1693 E. 119th.	E. 135th.
375 E. 53d.	717 E. 70th.	1055 E. 87th.	E. 104th.	1711 E. 120th.	Harlem River.
393 E. 54th.	731 E. 71st.	1075 E. 88th.			

MADISON AVENUE.

1 E. 23d.	80 E. 40th.	582 E. 57th.	875 E. 73d.	1603 E. 108th.	1929 E. 124th.
11 E. 24th.	298 E. 41st.	606 E. 58th.	931 E. 74th.	1628 E. 109th.	1943 E. 125th.
21 E. 25th.	314 E. 42d.	628 E. 59th.	953 E. 75th.	1647 E. 110th.	1969 E. 126th.
37 E. 26th.	330 E. 43d.	650 E. 60th.	973 E. 76th.	1665 E. 111th.	1991 E. 127th.
60 E. 27th.	344 E. 44th.	660 E. 61st.	987 E. 77th.	1693 E. 112th.	2013 E. 128th.
78 E. 28th.	350 E. 45th.	686 E. 62d.	1009 E. 78th.	1705 E. 113th.	2029 E. 129th.
96 E. 29th.	E. 46th.	708 E. 63d.	1031 E. 79th.	1729 E. 114th.	2049 E. 130th.
116 E. 30th.	E. 47th.	726 E. 64th.	1047 E. 80th.	1747 E. 115th.	2071 E. 131st.
132 E. 31st.	412 E. 48th.	750 E. 65th.	1071 E. 81st.	1767 E. 116th.	2099 E. 132d.
150 E. 32d.	430 E. 49th.	770 E. 66th.	1103 E. 83d.	1781 E. 117th.	2119 E. 133d.
168 E. 33d.	450 E. 50th.	790 E. 67th.	1121 E. 84th.	1809 E. 118th.	2139 E. 134th.
184 E. 34th.	E. 51st.	811 E. 68th.	1221 E. 88th.	1829 E. 119th.	2149 E. 135th.
198 E. 35th.	E. 52d.	822 E. 69th.	1293 E. 92d.	1837 E. 120th.	2173 E. 136th.
214 E. 36th.	510 E. 53d.	841 E. 70th.	1414 E. 98th.	1861 E. 121st.	2198 E. 137th.
228 E. 37th.	530 E. 54th.	E. 71st.	1480 E. 102d.	1881 E. 122d.	E. 138th.
244 E. 38th.	542 E. 55th.	E. 72d.	1553 E. 105th.	1901 E. 123d.	Harlem River.
262 E. 39th.	560 E. 56th.				

SIXTH AVENUE.

1 Carmine.	132 W. 10th.	319 W. 20th.	519 W. 31st.	677 W. 39th.	885 W. 50th.
2 Minetta	139 Milligan	337 W. 21st.	535 W. 32d.	697 W. 40th.	899 W. 51st.
Lane	Pl.	355 W. 22d.	Broadway	717 W. 41st.	917 W. 52d.
16 W. 3d.	149 W. 11th.	373 W. 23d.	W. 33d.	735 W. 42d.	935 W. 53d.
39 W. 4th.	169 W. 12th.	389 W. 24th.	Broadway	755 W. 43d.	951 W. 54th.
57 Wash. Pl.	187 W. 13th.	409 W. 25th.	W. 34th.	771 W. 44th.	971 W. 55th.
75 Waverly	207 W. 14th.	427 W. 26th.	Broadway	791 W. 45th.	991 W. 56th.
Pl.	227 W. 15th.	447 W. 27th.	W. 35th.	813 W. 46th.	1011 W. 57th.
94 W. 8th.	251 W. 16th.	465 W. 28th.	609 W. 36th.	829 W. 47th.	1031 W. 58th.
105 Greenwich	267 W. 17th.	483 W. 29th.	631 W. 37th.	847 W. 48th.	1051 W. 59th.
Ave.	287 W. 18th.	499 W. 30th.	651 W. 38th.	867 W. 49th.	Central Park.
112 W. 9th.	303 W. 19th.				

CLUB FACILITIES

THE CHEMISTS' CLUB, 52 East 41st Street, has accorded the privileges of its clubrooms, reading rooms, library and restaurant to those attending the Congress.

Visitors' cards will be issued to members of the Congress by the House Committee upon presenting an introductory letter from a member of the Chemists' Club. Ladies are admitted from 11 A.M. to 3:30 P.M.

THE ARION SOCIETY, 59th Street and Park Avenue, has placed its clubrooms, reading rooms, library, billiard rooms and restaurants at the disposal of the visitors to the Congress.

Upon request, visitors' cards will be issued at the office of the Secretary of the Arion Society, at the clubrooms, on presentation of the Treasurer's receipt for Congress membership dues. The privilege extends to ladies attending the Congress.

Special features of the restaurant service of the Club are: Table d'hôte lunch from 11 A.M. to 3 P.M. at 50 cents per person; table d'hôte dinner from 5 P.M. to 9 P.M. at 75 cents per person.

RESTAURANTS

MANHATTAN.

AMERICAN.

Archambault, 2678 Broadway.

Carlton Terrace, Broadway and 100th Street.

Kennelly's, 2852 Broadway.

Louis Martin's, 1457 Broadway.

Geo. Rector's, 1845 Broadway (corner 60th Street).

ENGLISH.

Browne's Chop House, 1424 Broadway.

Engel's Chop House, 61 West 36th Street.

Healy's, Columbus Avenue and 66th Street.

Keen's English Chop House, 70 West 36th Street.

FRENCH.

Cafe des Beaux Arts, 6th Avenue and 40th Street.

Hotel Brevoort, 5th Avenue and 8th Street.

Hotel Lafayette, 9th Street and University Place.

Mouquin's, 6th Avenue and 28th Street.

GERMAN.

Fleischmann's Cafe and Restaurant, Broadway and 11th Street.

Hofbraü Haus, 1214 Broadway.

Kaiserhof, 39th Street and Broadway.

Lüchow's, 110 East 14th Street.

Pabst's Harlem, 256 West 125th Street.

Reisenweber's, 987 8th Avenue.

Unter den Linden, Broadway and 97th Street.

ITALIAN.

Colaizzi's, 37 West 24th Street.

E. Roversi, 873 6th Ave.

CONEY ISLAND.

Brighton Beach Casino, Ocean Parkway.

Feltman's, Surf Avenue.

Ravenhall, Surf Avenue.

HOTELS

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Hotel.	Address.	Single Room		
		No Bath.	Bath.	
		One Person.	Two.	One.
Astor	44th St. & Broadway.	\$2.50-\$3.00	\$3.50 & \$4.00	\$3.50-\$6.00
Vanderbilt	34th St. & Park Av...	.....	.....	\$3.00-\$4.00
Waldorf-Astoria	34th St. & 5th Av...	\$2.00 up	\$4.00 up	\$3.00 up
Breslin	29th St. & Broadway.	\$1.50-\$2.00	\$3.00-\$3.50	\$2.50-\$5.00
Belmont	42d. St. & Park Av...	\$2.50	\$3.50	\$3.50
Bretton Hall.....	86th St. & Broadway.	.....	.....	\$2.50 up
Netherland	5th Av. & 59th St...	.....	.....	\$2.00
Manhattan	42d. St. & Madison Av.	\$2.50 up	\$4.00 up	\$3.00-\$5.00
Holland House.....	30th St. & 5th Av...	\$2.00-\$2.50	\$3.00-\$4.00	\$3.00-\$5.00
Ritz-Carlton	Madison Av. & 46th St.	.....	.....	\$4.00 up
Martinique	33d St. & Broadway..	\$2.50	\$3.00	\$3.00
St. Regis.....	5th Av. & 55th St...	\$3.00 up	\$5.00 up	\$5.00
Savoy	5th Av. & 59th St...	.....	.....	\$2.50
Plaza	5th Av. & 59th St...	\$2.50-\$3.00	.....	\$4.00
Park Avenue.....	33d St. & Park Av...	\$2.00-\$2.50	\$2.50-\$3.00	\$3.00
Gotham	55th St. & 5th Av...	.....	.....	\$3.00-\$5.00
Lorraine	45th St. & 5th Av...	.....	.....	\$2.00-\$3.00
Hargrave	72d St. & Colum. Av.	.....	.....	\$1.50
Herald Square.....	34th St. & Broadway.	\$1.50-\$2.00	\$2.50	\$3.00
Bristol	122 W. 49th St.....	\$1.25-\$1.50	\$1.50-\$2.00	\$1.50-\$2.50
Seymour	44 W. 45th St.....	.....	.....	.....
Somerset	150 W. 47th St.....	\$1.50	.....	\$2.00
Seville	29th St. & Madison Av.	.....	.....	\$2.00
St. Andrew.....	72d St. & Broadway..	.....	.....	\$1.50
Prince George.....	28th St. & 5th Av...	.....	.....	\$2.00
Great Northern.....	115 W. 56th St.....	.....	.....	\$2.00-\$2.50
Flanders	133 W. 47th St.....	.....	.....	\$2.00 & \$3.00
Iroquois	49 W. 44th St.....	.....	.....	.....
Imperial	32d St. & Broadway..	\$2.00 up	\$3.00 up	\$2.50 up
Belleclaire	77th St. & Broadway.	.....	.....	\$2.00
Ansonia	73d St. & Broadway..	.....	.....	\$3.00
Bonta	94th St. & Broadway.	.....	.....	.....
Martha Washington.	28th St. & Madison Av.	\$1.50	\$2.50	\$2.00
Long Acre.....	157 W. 47th St.....	.....	.....	\$1.50
Hermitage	42d St. & 7th Av...	\$1.50	.....	\$2.00 up
Marseilles	Broadway & 103d St.	\$1.50	.....	\$2.50
Wolcott	4 W. 31st St.....	\$2.00	.....	\$3.00
Webster	40 W. 45th St.....	.....	.....	.....
Grenoble	56th St. & 7th Av...	\$1.50 (\$9 week)	\$2 (\$12 week)	\$2 (\$12 week)
Algonquin	59 W. 44th St.....	.....	.....	\$2.50
Broztell	27th St. & 5th Av...	.....	.....	\$2.00 up
Cumberland	54th St. & Broadway.	.....	.....	\$2.50
Wellington	56th St. & 7th Av...	.....	.....	\$2.00
Woodward	55th St. & Broadway.	\$1.50	\$2.50	\$2.50
Frederick	208 W. 56th St.....	.....	.....	\$1.50
Woodstock	127 W. 43d St.....	\$2.00	\$3.00	\$2.50

HOTELS

NEW YORK HOTEL RATES PER DAY

Single Room. Bath.	Two Rooms Bath.		Suites.	Remarks.
Two.	Two.	Extra.		
\$4.50-\$8.00	\$7-12	\$1 extra person	\$10.00 up	Accommodate 600-750.
\$5.00-\$6.00	\$12, \$15 & \$18	.....
\$5.00 up	\$8.00 up	Will make better rates later on.
\$4.00-\$6.00	Can accommodate 300.
\$4.50	\$10.00 up	.....
\$3.00-\$4.00	{ 2 persons, \$4-\$6 }	Can accommodate 250.
.....	{ 3 persons, \$6-\$8 }	.....
.....	{ 4 persons, \$7-\$9 }	.....
\$3.00-\$4.00	\$5, \$6, \$7, \$8	.....
\$5.00	\$1.50 each extra person	.....
\$4.00-\$8.00	Can accommodate 150.
\$6.00 up	Can accommodate 50 to 75.
\$5.00
\$6.00	\$10.00 up	Can accommodate 200; 25 per cent. off for delegates.
\$3.00-\$4.50
\$5.00-\$7.00	{ 2 persons, \$7-\$8 }	Can accommodate 200-300 people.
.....	{ 3 persons, \$8-\$10 }	.....
.....	{ 2 people, \$6 }	Can accommodate 150-200.
\$4.00	{ 3 people, \$7 }	.....
.....	{ 4 people, \$8 }	.....
\$4.00-\$8.00	Can accommodate 250-300; 25 per cent. off these rates to delegates.
\$3.00-\$5.00	3 people, \$5.-\$10	Can accommodate 75-100.
\$2.50	Can accommodate 100.
\$1 extra person \$3.50	\$1 extra person	.....	.....	Accommodate 150-175.
\$2.50-\$3.00	{ 2 people, \$2.00 each }	.....
.....	{ 3 people, \$1.50 each }	.....
.....	{ 4 people, \$1.25 each }	.....
.....	{ 1 person, \$2.50 }	Can accommodate 200.
.....	{ 2 people, \$3.00 }	.....
.....	{ 3 people, \$1.50 each }	.....
\$3.00	{ 2 people, \$4.00 }	Can accommodate 100.
.....	{ 3 people, \$5.00 }	.....
\$3.50	Can accommodate 100.
.....	Can accommodate 50.
\$3.00
\$3.50-\$5.00	6-8 people, \$12 up	.....
\$3.00 & \$5.00	\$3.00 & \$4.00	Can accommodate 50.
.....	{ 1 person, \$2.00 }	.....
.....	{ 2 persons, \$3.00 }	Can accommodate 35-40.
.....	{ 3 persons, \$3.50 }	.....
\$4.00 up	\$5.00	.....
\$3.00-\$3.50	\$4.00	3 persons, \$5.00	{ 2 persons, \$5.00 }	Can accommodate 75-100.
.....	{ 3 persons, \$6.00 }	.....
\$4.00	\$5.00-\$11.00	Can accommodate 50.
.....	Can accommodate 50 at \$1.25 ea.
\$3.00	Can accommodate 20. Women only.
.....
\$2.50	{ 2 persons, \$3.00 }	Can accommodate 50. Men only.
.....	{ 3 persons, \$4.00 }	Men only.
.....
.....	{ 1 person, \$2.50 }	Accommodate 75-100.
.....	{ 2 persons, \$3.00 }	.....
.....	{ 5 people in three rooms, \$6.50 }	.....
\$4.00	Accommodate 50-75.
.....	\$6 up; extra cot, \$1	Accommodate 50.
\$2.50 (\$15 week)	Accommodate 50-75.
\$3.50	Accommodate 25.
.....	Accommodate 20.
\$3.50
\$3.00	\$6.00	.....
\$3.50
\$2.50
\$3.50	\$6.00	.....

SPECIAL POINTS OF INTEREST

Commencing at the southern end of the city (South Ferry) and running northerly, so that with the aid of the map in the portfolio attached to cover in front of book the entire trip can be easily made.

NEW YORK HARBOR. The situation of New York with reference to the sea and navigable rivers is unsurpassed by any other great city in the world. Yokohama and Rio Janeiro have beautiful, hill-girt harbors; New Orleans, Alexandria and Shanghai have the advantages of a good position at the mouth of broad rivers. Constantinople spreads along curving shores of a strait, securely protected from the ravages of the sea; but all these advantages are combined in the insular site of New York. In addition to these, we find in the harbor a landscape setting unapproached anywhere, which is the admiration of the world. New York Bay is a roughly lozenge-shaped stretch of water, reaching into the Hudson and East rivers at its northern end, stretching its southern point out through the Narrows into the Lower Bay, which is a broad indentation from the Atlantic, protected by Sandy Hook and the Bar, which form a north and south barrier stretching from New Jersey to Long Island. The mass of Staten Island, reaching to within a mile of Long Island at the Narrows, divides the Lower from the Upper Bay, the latter of which is the Harbor, properly speaking.

BATTERY PARK. Battery Park forms the southern termination of Manhattan Island. An admirable view of New York Harbor is obtained from the sea wall along the waterfront, which wall is one of the distinguishing features of the Battery. On the right across the North River is Jersey City. In the middle distance, five miles away, is Staten Island. On the left is Governor's Island, and on the extreme left across the East River is Brooklyn. On an appropriate site stands a statue of John Ericsson, which is of bronze, by Hartley, erected by the city, with this legend, "To the memory of a citizen whose genius has contributed to the greatness of the Republic and to the progress of the world." Near the high flagstaff in the Park, a tablet marks the spot where stood the famous Liberty pole. When the British evacuated the city in 1783 they left their flag flying from this pole, which they had greased to prevent climbing, but an American soldier climbed the pole, tore down the British banner and raised the American flag in its stead. The Battery took its name from a battery erected in 1693.

STATUE OF LIBERTY. "Liberty Enlightening the World," is probably the best known statue in the United States. It stands in New York Bay on Bedloe's Island, formerly the place of the execution of pirates, and is one of the most conspicuous objects in view either from the surrounding shores or from the decks of ocean vessels, bound through the Narrows. The draped female figure, of copper, 151 feet high, is crowned with a diadem, and holds high in the right hand a torch. The left hand clasps close to the body a tablet bearing the inscription, "July 4, 1776." Of the figure, the nose is nearly four feet long, the right forefinger is eight feet long and five feet in circumference, the head fourteen feet high; the right arm is 42 feet long. From the foundation of pedestal to torch is 305 feet 6 inches. The statue is the work of the eminent French sculptor Bartholdi, who in 1865 conceived the idea of a fitting memorial to be given by the French people to the United States in commemoration of the long established good will between the two nations. The statue cost \$200,000, which was defrayed by popular

subscription in France. It was unveiled in October, 1886. (For Statue of Liberty take ferry on south side of Battery Park.)

ELLIS ISLAND IMMIGRATION STATION. Castle Garden, now used as an aquarium, at the lower extremity of Battery Park, built for the defense of the city against the British in the War of 1812, in 1855 became the state immigrant depot, and nearly ten millions of immigrants passed through its walls. In 1891, however, the United States took charge of immigration, abandoned Castle Garden and established a new depot upon Ellis Island. This is a small island **between the Liberty Statue and the Communipaw shore**, which has almost been covered with a fine range of buildings. Hither all steerage passengers are transferred from the steamers in which they arrive, and before they can land, must be examined as to their eligibility as citizens, and be fully recorded. If they are bound to some interior point, they are put in charge of railway or steamship agents, and by them conducted to the trains or steamers. The Government never loses sight of, nor ceases to protect, the immigrant until he is prepared to face the new life. Communication is had from the Battery to the island by a ferry-boat.

THE AQUARIUM. The Aquarium, **near the sea wall on the southwest of Battery Park**, contains a large collection of fishes and marine life. The large floor tanks are devoted to seals, sea lions, sturgeon, and other large species, and the 100 wall tanks contain fresh and salt water fishes. There are shown in all over 3,000 living specimens. The daily supply of 300,000 gallons of salt water is furnished from a tidal well beneath the building, and there are heating and refrigerator plants to control the temperature of the fresh and salt water. The circular building of the aquarium was originally a fort—Castle Clinton—built for the defense of the city against the British in the war of 1812, and the spot where it stands then an island 200 feet from the shore. In 1822, Congress ceded the property to the city, and it was converted into a place of amusement, and was named Castle Garden. Among the notable people giving receptions here were General Lafayette, Louis Kossuth, Presidents Jackson, Tyler and Van Buren, and the Prince of Wales. Here in 1850 Jenny Lind made her American debut under the management of P. T. Barnum. (For other particulars see Public Museums, page 42.)

THE CUSTOM HOUSE. The New York Custom House, **fronting on Bowling Green**, is the largest and most beautiful custom house in the world. The building was designed by Cass Gilbert; it is of Maine granite, and cost \$4,500,000. It is embellished with a wealth of exterior decoration, the motives of which are found in the world-wide commerce of the United States, of which 75 per cent. enters through the port of New York. Extending across the sixth floor of the Bowling Green facade is a series of twelve statues, the subjects of which are Greece, Rome, Phenicia, Genoa, Venice, Spain, Holland, Portugal, Denmark, Germany, France and England. The architecture is of the modern French Renaissance. The dome is the largest of solid masonry in the world. The building rests on historic ground. Here stood Fort Amsterdam, built by the Dutch in 1626, and replaced in 1790 by the Government House, erected for the accommodation of Washington's administration. Here George Clinton and John Jay lived. Bowling Green, a small park opposite, enclosed up to the time of the Revolutionary War a statue of King George III.

THE PRODUCE EXCHANGE. The Produce Exchange, on **Whitehall and Beaver Streets**, near the lower end of Broadway, occupies a building which is one of the architectural features of New York. The structure is of immense size, 300 by 150 feet. The business done here is the wholesale buying and selling of produce. Grain, flour, lard, provisions, petroleum, oil, naval stores, seeds, butter, cheese, hops, hay and straw are the principal articles dealt in. The

volume of business exceeds a billion of dollars a year. In the corner is the "Wheat Pit."

FRAUNCES' TAVERN. This is on the southeast corner of **Broad and Pearl Streets**. In it, on the second floor, is the famous "Long Room" in which General Washington took affecting leave of his officers and aides, December 3, 1783, before proceeding to Congress to surrender his commission. It was built in 1700, and opened as a tavern by Samuel Fraunces in 1762. The building has been restored by the Sons of the Revolution. The second floor contains a display of historic relics.

THE CONSOLIDATED EXCHANGE. The Consolidated Petroleum and Stock Exchange, which occupies a monumental building with large accommodations for business, is at the corner of **Broad and Beaver Streets**. It arose from the consolidation of several boards dealing in oil, mining and general securities and began operations in 1875. It now does nearly as much business as the older board. The entrance is on Beaver Street.

STOCK EXCHANGE. The New York Stock Exchange is the oldest and most legitimate organization of brokers in New York. It occupies a building at **10 Broad Street**, extending through to New Street. The hours are from 10 A. M. to 3 P. M., and members are forbidden to make any transactions except during those hours. The dealings are wholly in stocks, bonds and other securities which have been recognized or "listed" by the Exchange. The most prominent of these are represented by name upon iron standards scattered about the floor.

WALL STREET. Wall Street took its name from the wall which once defended New Amsterdam at this point. In 1652 the defenseless condition of the Dutch town led Governor Stuyvesant to prepare a fortified line of defense against a probable attack by Indians and the English colonists. A line of palisades was planted from river to river, banked up with earth. This wall rapidly decayed, and after the capture of the city by the English in 1663, was substantially rebuilt and defended by stone bastions at the gates at Broadway and East River. The wall outlived its usefulness and disappeared 200 years ago, but the name it gave to the street which ran beside it has become the most famous street name in the world. The financial institutions of the city became concentrated here gradually, having been first drawn to the locality by the fact that nearly all the government buildings stood on the street. The City Hall was here before its removal to its present site. Wall Street is the financial centre of the country. The name is synonymous with securities, certificates, bonds and shares, gold, money, investment, etc.

SUB-TREASURY. The Sub-Treasury is a large Doric building of granite on **Wall Street**, extending from **Nassau to Pine Streets**. The building occupies the site where stood in Colonial times the City Hall and the Capitol of the Province, which afterward became Federal Hall, in which assembled the first Congress. In front of the Wall Street portico stands Ward's statue of Washington, unveiled November 26, 1883, the centennial anniversary of Evacuation Day. Just inside the Treasury door is preserved, under glass, a brownstone slab inscribed, "Standing on this stone, in the balcony of Federal Hall, April 30, 1779, George Washington took the oath as the first President of the United States." The work of constructing this massive building extended over a period of about ten years. From foundation to roof it is an ingeniously welded mass of stone and iron. For all purposes of defense the Sub-Treasury is a fortress. Adjoining the Sub-Treasury is the **United States Assay Office**, a branch of the Mint. From twenty to one hundred millions of crude bullion are here received and assayed in the course of a year.

EMPIRE BUILDING, Broadway and Rector Street. (See Buildings, page 33.)

TRINITY CHURCHYARD, at **Broadway and Wall Street**, is full of historic interest. Many of the graves go back to the 17th century. There was a graveyard here before the church was built in 1697. Near the porch on the north side of the church is the grave of William Bradford, who printed the first newspaper in New York. On the left is the monument erected to the memory of Captain James Lawrence, of the United States Navy, of the man-of-war "Chesapeake," whose dying cry is carved upon its sides: "Don't give up the ship." Alexander Hamilton's tomb is marked by the conspicuous white marble monument near the Rector Street railing. Here, too, is the grave of his wife. Other distinguished dead who repose here are: Livingston and Lewis, signers of the Declaration of Independence; Albert Gallatin, who succeeded Hamilton as Secretary of the Treasury; Robert Fulton, inventor of the steamboat. Trinity Corporation has erected a monument, the "Martyrs," in memory of the American patriots who died in British prisons in this city during the Revolutionary War.

TRINITY CHURCH, **Wall Street and Broadway**. (For description see Churches, page 41.)

TRINITY BUILDING, **north side of Trinity Churchyard**. (See Buildings, page 35.)

SINGER BUILDING, **Broadway and Liberty Street**. (See Buildings, page 34.)

CITY INVESTMENT BUILDING, **adjoining Singer Building**. (See Buildings, page 33.)

HUDSON TERMINAL BUILDINGS, **Cortlandt and Church Streets**. (See Buildings, page 33.)

ST. PAUL'S CHAPEL, **Broadway and Fulton Street**. (See Churches, page 41.)

PARK ROW is on the east side of City Hall Park, the Post-Office being on the south and Chambers Street on the north. The most conspicuous building on this street is the Park Row Building (see description under Buildings), with its 39 stories. Other prominent buildings are the Potter Building and the American Tract Society Building. To the north are the Tribune and Sun publication buildings.

POST OFFICE. The general post office is at the junction of **Broadway and Park Row**. The building was designed by Mr. Mullet and is not regarded attractive from an architectural standpoint. The building has a frontage of 144 feet at the intersection of Broadway and Park Row, and is five stories above the sidewalk. The general post office has numerous branch sub-stations. Over 1,600 mails are dispatched daily. The receipts are over \$20,000,000 annually. A new post office is now being erected on a site in the rear of the new Pennsylvania terminal.

WOOLWORTH BUILDING, **Broadway and Park Place**. (In course of construction.) (See description under Buildings, page 35.)

CITY HALL. The special architectural feature of City Hall Park is the City Hall, much admired by architects for the well-balanced and symmetrical design and the purity of its classic details. It was completed in 1812. The total expenditure upon the building was less than \$500,000. Marble was used for the front and ends, and brownstone for the rear, for the builders at that day imagined that the city would never go beyond that. In 1858 a spark from the fireworks, displayed from the roof at the celebration of the successful laying of the first Atlantic cable, set fire to the cupola, which was destroyed, and the low dome over the rotunda was damaged. They were clumsily replaced. The Mayor's

room is on the first floor. Under one of its windows on the outside is a tablet recording: "Near this spot, in the presence of General George Washington, the Declaration of Independence was read and published to the American Army, July 9th, 1776." The Governor's Room, originally intended for the use of the Governor of the State, is on the second floor. Here are found many historical objects and paintings of distinguished Americans.

MUNICIPAL BUILDING, Centre Street and Park Row. (In course of construction.) (See Buildings, page 34.)

CRIMINAL COURTS BUILDING. The Criminal Courts occupy a building at **Centre and Franklin Sts.**; an elevated inclosed passageway, commonly known as the "Bridge of Sighs," connects this building with the Tombs. This building is a handsome Renaissance edifice of stone, red brick and terra cotta, whose interior court is handsomely ornamented with carved marble and bronze. There are many fine mural paintings by Edward Simmons in Part I Room of the Supreme Court. These were made in 1895 under the direction of the Municipal Art Commission, which now controls all matters relating to the embellishment of the public buildings. The **Tombs** is the name sometimes applied to the **City Prison**, suggested long ago by the gloomy architecture, which made it for many years one of the landmarks of the city. The site was formerly occupied by the Collect, a sheet of water connected with the Hudson River by a strip of swamp through which ran a little rivulet, afterward enlarged into a barge canal, on a line with the present Canal street, which derives its name from this circumstance. The prison now covers the site of the pre-Revolutionary gibbet.

CHINATOWN. **Mott Street, from Bayard to Chatham Square,** is the heart of Chinatown. It is estimated by the Chinese Consulate that there are 7,000 Chinese in New York, and a majority of these has its home in this neighborhood. Here are the Joss houses, the civil officers of the colony, the merchants, the tailors, and shoemakers, the lodging houses, the gambling rooms, the restaurants, and the opium dens. There are some thirty "companies" of merchants in this colony, and many of them do a large business, not only at home, but trade with Chinese in the outlying towns. The largest wholesale stores are in Mott Street and Chatham Square, and the largest retail shops in Pell Street. Their quarters present an appearance of cleanliness, as well as their personal habits. The Joss house is a Chinese temple for religious worship. In one of these Joss houses will be seen a shrine, occupied by a half-length painting representing Gwan, Gwing Shing Te, the only original god of the Chinese Empire. On his left is the woman-like figure of his grand secretary, Lee Poo. A Chinese theatre is conducted at 5 Doyer Street.

LITTLE ITALY. Around Mulberry Bend Park is a colony of Italians and other foreigners, which place is sometimes spoken of as "Little Italy." Not a word of English is heard here—only a rough, guttural Italian. This is the most unmanageable crime-nursery in the city. Six-story tenements, with unwashed windows, rise in a solid wall on both sides of **Mulberry Street**. The first floors are occupied by shops of various kinds, and along the curbstone, every two or three doors, are groups of trucks whose drivers and horses are stabled somewhere in the midst of the tenements.

THE GHETTO. In the vicinity of **Forsythe, Allen, Orchard, Ludlow, Hester, and Canal Streets** we find that part of New York which has the densest population. One single square mile of this part of the town holds a quarter of a million persons. Nine-tenths of them are Russian, Polish and German Jews. They are the hardest working part of the population. The Jews form a community by themselves, supplying each other's wants and having communica-

tion only to a limited extent with outsiders. The fakirs who throng the lower part of the city get their supplies here.

COOPER INSTITUTE. Cooper Institute, for the advancement of science and art, was founded by Peter Cooper in 1859. The building was erected by him at a cost of \$630,000 and endowed with \$300,000 for the support of the free reading room and library. It stands at the head of the Bowery where Fourth Avenue branches off to the left and Third Avenue to the right. Its purpose is to provide instruction at night for young people who work by day. The night schools in science, and art-mathematics, engineering, electricity, chemistry, etc., have been attended by nearly 100,000 different persons. The free library and reading room are visited by an average of 2,000 readers a day. The Hall of Cooper Institute is used by political and other meetings, and has been the scene of many memorable gatherings. Abraham Lincoln delivered his Cooper Institute speech here February 27, 1860, and from that day to this, the great orators of America have been heard here; and speeches have been made which have affected city, state and nation. In Cooper Institute Park, south of the building, is a statue of Peter Cooper, by Augustus St. Gaudens, who was a pupil in Cooper Institute.

FULLER (Flatiron) BUILDING, 23d Street and Broadway and Fifth Avenue. (See Buildings, page 33.)

METROPOLITAN BUILDING, Madison Avenue and 23d Street. (See Buildings, page 34.)

MADISON SQUARE GARDEN. This structure was opened in June, 1890, and offers accommodations for a variety of entertainments. It occupies the site of the old garden where circuses, athletic matches and exhibitions were wont to be seen. The new building is a handsome structure of buff brick and light terra cotta. At the southwest corner a tower rises to a height of 300 feet, including the pinnacle, 356 feet. The building contains an amphitheatre, a theatre, a restaurant, a concert hall, a roof garden and several smaller rooms. The amphitheatre is 310 by 194 feet and 80 feet high, with an area containing a track one-tenth of a mile long. It has a permanent seating capacity for 6,000 people, and for conventions and similar purposes can be arranged to seat 12,000. The cost of the building was \$3,000,000. It is the largest amusement building in America. On the Madison Avenue front of the building and extending on either side is an arcade whose arches rest on pillars of solid marble. A colonnade with polished marble pillars extends around the top story; and there are cupolas, domes, towers and gilded finials. The tower is an adaptation of the Giralda in Seville.

HERALD SQUARE. Herald Square, at the intersection of Broadway and Sixth Avenue, 33d and 36th Streets, takes its name from the Herald Building, which is its most beautiful architectural adornment. It was formerly called Greeley Square. The style of the Herald Building is of the early Italian Renaissance, the exterior is profusely covered with decoration most delicate in design. The terminal station of the Pennsylvania Railroad is one block west of this square.

TIMES SQUARE. Times Square, at the intersection of Broadway and Seventh Avenue, from 42d to 47th Street, takes its name from the twenty-five story building of the New York Times, which dominates the district, and is one of the most conspicuous architectural monuments of the town. The square is the centre of great hotels and amusement places. On the corner of 42d Street is the Hotel Knickerbocker, and two blocks above on the west side is the Hotel Astor.

NEW YORK PUBLIC LIBRARY. The New York Public Library was formed by the consolidation of the Astor Library, the Lenox Library and the Tilden Trust, May 23, 1895, and later by the inclusion of the New York Free Circulating Library and the chain of 42 libraries endowed by Andrew Carnegie in 1901. The city was empowered to grant the site of the old Croton Reservoir, **between Fortieth and Forty-second Streets, facing Fifth Avenue** on the east, for the new consolidated library. The city also gave the necessary funds for its construction. The cornerstone was laid May 10, 1901, and the library opened to the public on May 23, 1911. The building has a line of 390 feet on Fifth Avenue and a depth of 270 feet. It is fireproof and equipped with shelving for 25,000,000 volumes. The combined endowment of the libraries is \$3,446,500, and the number of volumes about 1,000,000. The central building at 42d Street and Fifth Avenue is open from 9 A. M. to 10 P. M. every day; and Sundays from 1 to 10 P. M.

ST. PATRICK'S CATHEDRAL, Fifth Avenue and 51st Street. (See Churches, page 41.)

CENTRAL PARK, 59th Street to 110th Street, from Eighth to Fifth Avenues. For all points of interest in Central Park take public carriages (25c.) at 59th Street, Fifth or Eighth Avenue entrance. A description of this park will be found under Parks, but among the points of interest the following, "The Obelisk" and "Museum of Art," may be particularly mentioned here:

THE OBELISK. The obelisk, or "Cleopatra's Needle," was presented by the Khedive of Egypt to the United States. It was brought to America by Lieut.-Com. Henry H. Goringe, and erected in Central Park in 1881. The cost of the removal was \$102,576, which sum was contributed by William H. Vanderbilt. The shaft is 69½ feet high, and a single stone. The weight is 448,000 pounds. The bronze crabs bear date from time of Caesar.

MUSEUM OF ART. The Metropolitan Museum of Art occupies a site in **Central Park opposite East 82d Street.** The Museum is a private corporation founded in 1870 by a number of public-spirited citizens, and managed by a board of trustees. The building was erected by the city. The Metropolitan is the largest and richest art museum in America. The central Grand Hall contains the Willard collection of architectural casts, reproducing details of the notable architecture of many periods. In many of the halls are found reproductions of sculpture. There are over 800 examples, beginning at a time 3,700 years B. C., and illustrating the development through the Egyptian, Assyrian, Persian, Greek, Roman and Medieval periods, and the Italian Renaissance. Here are the crude beginnings of antiquity and the noble works of the masters. In halls two and three are wrought iron work, bronzes and reproductions of bronzes. In the halls devoted to Egyptian Antiquities are sarcophagi and mummy cases; mummies of human beings, crocodiles, cats and the ibis, etc. The Museum also possesses invaluable paintings which fill eleven galleries and number over 700. (For other particulars see Public Museums, page 42.)

AMERICAN MUSEUM OF NATURAL HISTORY, 77th Street and Central Park West. The present building forms a part of a group that will cover the entire square. It was established in 1869. The departments of the Museum embrace Geology, Minerals, Mammals, and Birds, Vertebrate Paleontology, Anthropology, Entomology and Invertebrate Zoology. Among the most striking exhibits are cases of taxidermy groups, exquisite representatives of birds and mammals amid their life surroundings. Of bird specimens for study, the Museum possesses 60,000, and of mammals 20,000. In Entomology there are the Jessup collection of economic entomology, Elliot of 6,600 butterflies and moths, Angus of 13,000 butterflies, Edwards of 250,000 butterflies, Schaus of 5,000 moths, Hoffman of 5,000

butterflies, a collection of 10,000 beetles and a series illustrating insect architecture. North America Forestry is shown in the Jessup collection of woods, embracing more than 500 specimens; and of North America building stones there are 1,500. Gems and pearls are shown in the famous Tiffany collection. (For other particulars see Public Museums, page 42.)

SOLDIERS' AND SAILORS' MONUMENT. This monument is on **Riverside Drive at 89th Street**. It was erected to commemorate the citizens of New York who took part in the Civil War. It is a circular building of pure white marble, modeled upon the choragic monuments of ancient Athens. The monument has a peristyle of twelve Corinthian columns 35 feet high. It was provided by the city at a cost of \$250,000 and was dedicated in 1902. The monument occupies a conspicuous site on the drive.

CATHEDRAL OF ST. JOHN THE DIVINE, Cathedral Heights, **West 113th Street**. (See Churches, page 40.)

COLUMBIA UNIVERSITY. Columbia University, situated at **116th Street and Broadway**, began, in 1754, as King's College, under a charter from the English crown, and by the aid of money raised mainly in England. After the Revolutionary War the Legislature of the state made a grant of land and re-incorporated it as Columbia College, under a board of regents, afterwards changed to twenty-four self-perpetuating trustees. The buildings occupy a high level site upon the grounds, which cover over eighteen acres. (See diagram of Columbia University, page 8.)

GRANT'S TOMB. Grant's Tomb is on **Riverside Drive at 123d Street**, and occupies a commanding site overlooking the Hudson, and surrounded by quiet lawns. It was designed by John H. Duncan, and is constructed of white granite from Maine. The proportions are imposing. The square structure is 90 feet on the side and 72 feet in height. The dome rises 150 feet from the ground. Through a circular opening in the floor, the sarcophagus is seen in the crypt directly beneath the centre of the dome. It is of polished red porphyry and is supported on a pedestal of granite. Upon the lid is the name of Ulysses S. Grant. The companion sarcophagus, a counterpart in material and design, contains the remains of Mrs. Grant, in compliance with an expressed wish of General Grant that Mrs. Grant should lie by his side. The monument cost \$600,000, contributed by 90,000 givers. The cornerstone was laid by President Harrison April 27, 1892, and was dedicated with imposing ceremonies on April 27, 1897, the seventy-fifth anniversary of General Grant's birth, on which occasion there was a military, naval and civic parade in which 50,000 men were in line.

COLLEGE OF CITY OF NEW YORK. The College of the City of New York, which occupies a series of large turreted buildings at **140th Street and Amsterdam Avenue**, is free to all young men residing in this city and prepared at the city schools; it offers both a literary-classical and a scientific course, each four years in length. There is also a mechanical course of instruction and a post-graduate course in engineering. The total number of students is about three thousand. (See diagram of College of City of New York, page 10.)

THE JUMEL MANSION. The Jumel Mansion, at **160th Street, East of Amsterdam Avenue**, is the most famous historic house on Manhattan Island. It was built in 1763 by Roger Morris, the husband of that Mary Philipse whom Washington is said to have greatly admired. Washington took the mansion for his headquarters on his retreat from New York, and occupied it for 36 days. In 1790 Washington gave a dinner here to his cabinet. In 1810, Stephen Jumel, a rich French merchant, bought it and restored it.

THE SPEEDWAY commences at **155th Street** and north end of **St. Nicholas Place**. This is a public speeding course along the west bank of the Harlem River provided by the city as a place where owners of fast horses may test their paces. The length is about three miles and its width from 125 to 150 feet. The grade is as nearly level as it was possible to get it. There are a few inclines and declines, but beyond Washington Bridge, there is practically a straight and level stretch for two miles. It cost the city \$3,000,000. **High Bridge**, at West 175th Street, carries across the Harlem the original Croton Aqueduct. The bridge is 1,460 feet in length; and the crown of the highest of the fourteen arches is 116 feet above the river.

HARLEM RIVER. The Harlem River, connecting the Hudson with the East River and Long Island Sound, and separating Manhattan Island from the mainland, is seven miles long. The Government has made it a ship canal for approach to the Sound without going through Hell Gate. It flows through a picturesque valley and is spanned with great bridges.

UNIVERSITY OF THE CITY OF NEW YORK. The original and main building of this University was the castellated and historic structure which had stood for sixty years at the northeastern corner of Washington Square. This building was demolished in 1894 and a new modern structure has taken its place, part of which is occupied by the University, the general offices, School of Law and Commerce, and School of Pedagogy being located here. A series of new buildings, upon an extensive scale, have been completed on **University Heights**, on the east bank of the Harlem River, near **Kingsbridge**. These form the nucleus of the University. The **Hall of Fame** for Great Americans, which is one of the buildings enclosing the campus of the University, is the gift of Miss Helen Gould and was completed in 1900. This structure is a marble colonnade 500 feet in length, built about the library. It contains 150 panels, in which will be set bronze tablets for the names of 150 great Americans. Twenty-nine names were chosen in 1900, eleven others in 1905, and five are to be added every fifth year.

VAN CORTLANDT PARK lies at northern boundary of city, between Broadway, Van Cortlandt Avenue, Jerome Avenue and Mt. Vernon Avenue. (See Parks, page 37.)

MOSHOLU PARKWAY connects Van Cortlandt and Bronx Parks.

BRONX PARK, North of East 182d Street and White Plains Road. (For special points of interest in Bronx Park see Parks, page 36; also Public Museums for information as to New York Botanical Garden and New York Zoological Park, page 42.)

INSTITUTIONS AND SOCIETIES. On **Blackwell's Island**, the lower end of which is opposite 50th Street, is the great penitentiary, to which offenders are sent when convicted in the police courts and reported as sent to the island. There are here on this island also the almshouse, workhouse, several asylums and the great Charity Hospital. On **Ward's Island**, above Blackwell's, is an insane asylum and institutions for sick and incapable immigrants. Other similar institutions are on **Randall's**, **Hart's** and on **North Brother Island**. One of the most widely known societies in New York is the Society for the Prevention of Cruelty to Animals, founded by Henry Bergh, and has branches in the principal cities of the United States and Canada. It occupies a handsome stone edifice at the corner of **Madison Avenue** and **26th Street**. The Society for the Prevention of Cruelty to Children is located in a fine building erected for it by its president, Elbridge T. Gerry, at the corner of **23d Street** and **Fourth Avenue**. Its object is the enforcement of laws for the protection of children. The Society for the Prevention of Vice is under the direction of Anthony Comstock, and its offices are at **140 Nassau Street**.

BROOKLYN.

BROOKLYN NAVY YARD. The Navy Yard is on the Wallabout—a basin or indentation from the East River, where in Revolutionary days was moored the dreadful Jersey, worst of the prison hulks. It is at the foot of York Street. It is the largest naval station in the country, and comprises an area of about 145 acres, 45 of which are in the yard proper and enclosed by a brick wall. The deep bay of "the basin" or Wallabout, into which the dry-docks open, divide the Navy Yard into two parts. Musters and drills of sailors, marines, or recruits take place on the "Cob Dock," being the peninsula part outside of the basin and which forms an extensive park-like space. Within the basin lie many naval ships, transports, torpedo boats, etc., in or out of commission. Huge machine shops, storehouses, and offices of the superintendents occupy largely the space within the enclosure. A fine library, and a large collection of historical curiosities are seen in the Naval Lyceum, founded by the officers of the navy in 1833. Several trophies of the prowess of the navy in the country's wars are displayed in a little park on the outside of the enclosed grounds.

PROSPECT PARK, Flatbush and Ocean Avenues. (See Parks, page 37.)

MUSEUM OF BROOKLYN INSTITUTE, on Eastern Parkway. (For particulars see Public Museums, page 42.)

PROMINENT OFFICE BUILDINGS

IN MANHATTAN

(Alphabetical order.)

CITY INVESTMENT BUILDING. The City Investment Building, adjoining the Singer Building on Broadway, Cortlandt and Church Streets, is one of the largest office buildings in the world. It is thirty-four stories in height, being 486 feet high; it covers 27,000 square feet, with 13 acres of floor space. There is room for 6,000 tenants. Running from Broadway to Church Street, there is a magnificent corridor 315 feet in length. The building contains 21 elevators, and in matter of details is unsurpassed by any office building in the world. The caisson foundations were sunk 80 feet below the surface. The amount invested in land and building exceeds \$10,000,000. It is owned by the City Investment Company.

EMPIRE BUILDING. One of the most prominent of the New York skyscrapers is the Empire building at 71 Broadway, corner of Rector Street, owned by the Potter Estate. The hall to this building constitutes the approach from Broadway to the Rector Street Station of the elevated railroad, and thousands of people pass through it daily.

FULLER (Flatiron) BUILDING. This building, commonly known as the Flatiron Building, located at the intersection of two of the most famous streets in the world (Broadway and Fifth Avenue) where they are crossed by 23d Street, because of its peculiarity of construction and towering height, is one of the most conspicuous buildings in New York. It is called the Flatiron Building because the plot on which it stands is of flatiron shape. The building, including site, cost \$4,000,000. It is 300 feet high, with 20 stories and 456 offices above the fourth floor. It was the first great triumph of steel frame construction.

HUDSON TERMINAL BUILDING. This building on Church Street, between Fulton and Cortlandt, is the terminal of the Hudson River Tunnels to Jersey City and is to be the nucleus of all underground railway systems that converge under lower Manhat-

tan. It is the largest office structure in the world. The twenty-two stories have 4,000 offices, with an estimated population of 10,000. The building covers 70,000 square feet of ground. It has an arcade which is a great glass inclosed passageway lined with shops and booths. It is larger than any of the famous European arcades.

METROPOLITAN BUILDING. The Metropolitan Tower is one of the architectural wonders of the world. This stupendous shaft of pure white marble towers to a height of 658 feet above the sidewalk, 103 feet higher than the Washington Monument. The tower has forty-eight stories. Compared with other structures, it outranks the Cologne Cathedral, which is 516 feet; the Rouen Cathedral, with its 490 feet; the Great Pyramid, with its 485 feet; the Washington Monument, with its 555 feet; the Philadelphia City Hall, with its 537 feet; and the recently constructed Singer Building, with its 612 feet. The building proper, 200 feet by 425 feet, occupies the entire block between **Madison and Fourth Avenues and 23d and 24th Streets.** The total floor area of building is about 25 acres. The tower fronts on Madison Avenue 75 feet and 24th Street 85 feet; the height from cellar floor to top, 680 feet; total height from foundation, 691 feet. The building is the home of the Metropolitan Life Insurance Company.

MUNICIPAL BUILDING. The construction of the new Municipal Building for the City of New York, located at the **intersection of Park Row, Duane and Centre Streets**, near the end of the old Brooklyn Bridge, New York, is progressing rapidly towards completion in the early part of 1913. With its equipment the building is estimated to cost \$12,000,000, exclusive of the land value, and will afford accommodation for many of the city departments and bureaus at present scattered through various rented buildings in the city.

The building is a steel frame fireproof structure faced with granite, and is twenty-five stories in height, surmounted by a fifteen-story tower. The style is essentially classic, thus following the accepted tradition of buildings of a civic character and is also in harmony with the style of the other public buildings which lie in close proximity.

Below the street level the space is devoted to the power plant, mechanical installation, storage and principally to a station for the subway lines and their extension for the bridge service. Above the street the floors are devoted to offices and public rooms, the floor area of the 25-story structure being nearly seven-eighths of an acre for each floor, the total floor area being about 700,000 square feet.

The entire building is founded on pneumatic caisson piers, about two-thirds of which were sunk to bed rock through 100 to 120 feet of sand and gravel, bed rock lying 130 to 150 feet below curb level.

PARK ROW BUILDING. The Park Row Building, on **Park Row, facing the Post Office**, has 31 stories, with a height from sidewalk to cornice of 336 feet; to top of towers 390 feet; to top of flagstaff 447 feet. This was one of the first skyscrapers erected in the city. The depth of the foundation below the street line is 75 feet, and the weight of the building 20,000 tons. The cost of building and land was \$4,000,000. There are 950 offices.

SINGER BUILDING. The Singer Building, erected by the Singer Manufacturing Company, at **Broadway and Liberty Street**, at the time of its completion in the spring of 1908, was the highest office building ever erected. It rises 47 stories above the sidewalk with pinnacle 612 feet in air. It has place among the big things of the earth, exceeding in height many of the celebrated edifices of the world. The Singer is three times the height of Trinity steeple and twice the height of the Flatiron Building. The struc-

ture is noteworthy also for beauty of design and for features involved in its construction. It is of the modern French school of architecture. The materials of the facades are pressed brick and Indiana limestone. The tower shows on each side an immense bay window, extending from the fourteenth to the thirty-four floors, each capped with an arch supporting a semi-circular balcony. Some details of the building are: Height from sidewalk to top of lantern, 612 feet; basement floor to top of flagstaff, 724 feet; forty-nine stories; 9½ acres of floor space. Not a cubic inch of wood is used in the construction or finish.

TRINITY BUILDING. The Trinity Building, which is 310 feet in height, overlooking Trinity Church Yard, has the advantage of a position which gives the vast Gothic facade peculiar impressiveness. Adjoining is the **United States Realty Building**, a twin structure 300 feet high. Each building is one of 21 stories. The two buildings with the land cost \$15,000,000.

WOOLWORTH BUILDING. Towering far above all the other New York skyscrapers, the new Woolworth Building on the west side of Broadway, between Park Place and Barclay Street, will be the tallest structure in the world, excepting only the Eiffel Tower in Paris. It will stand without a peer as the highest business structure in the universe, its 55 stories of stone and steel making the tall buildings of a few years ago appear as pigmies in comparison. The contract calls for its entire completion in the Fall of 1912.

Reaching one-seventh of a mile from the ground, it would, if laid out flat be longer than three city blocks. Standing alongside the Cathedral of Cologne, the latter would be 250 feet below its top, while the Great Pyramid of Cheops would be 200 feet below, making them dwarfs in comparison. The Metropolitan Tower, which has been the wonder of the Architects, is outclassed by fifty feet, the height of an ordinary five-story building.

According to specifications of Cass Gilbert, the architect, the Woolworth Building will measure 750 feet from the door of the cupola to the street level, and will contain more than 20,000 tons of steel girders. It will cost more than \$7,500,000.

One of the features of the building will be a tower, containing an immense electric light, which may be seen for miles around the country. On the 54th story will be an Observatory, which Mr. Woolworth proposes to open to the free use of the public.

The first story or street floor is designated for stores and an arcade, with openings on Broadway, Park Place and Barclay Street.

There will be four self-containing stairways which will run from the top of the tower to the street. These will be separated from the corridors and offices by fireproof walls and wire glass doors. They will make the stairs not only fireproof, but smokeproof, so that in case of fire in any part of the building causing smoke, the stairways will be free of it. There are to be 34 elevators for passenger service.

The exterior of the building will be of stone and terra cotta in design to be a combination of the Italian, French and modern Renaissance throughout the main part with Gothic steeples at the roof of the main structure.

McALPIN HOTEL. The McAlpin Hotel, located at 34th Street and Broadway, which is now in course of construction, will, when completed (about December, 1912), be the largest and costliest hotel in the world. The building is to be 25 stories in height and will have 1,600 guest bedrooms, 1,100 bath rooms and a large grand ball room. A rather unique feature is a miniature hospital, which will be equipped with every modern appliance known to surgery and medicine.

PRINCIPAL PARKS

(Alphabetical order.)

MANHATTAN AND BRONX.

BRONX PARK. Bronx Park lies along both sides of Bronx River above West Farms. The river took its name from Jonas Broncks, one of the early Dutch proprietors. The park was long ago the property of the Lorillards, whose mansion still stands near the waterfall that ran the old snuff mill wherein the family fortune was begun. It is now used for park and police purposes. An interesting natural feature of the park is the Rocking Stone. Of the 662 acres comprised in the park area, 250 have been given to a botanical garden, and 261 to a zoological park. The zoological park is unequaled by any institution of its class in the world. Here is found a grand display of animals, domiciled as nearly as possible in their native circumstances, and special attention is given to American animals. The botanical garden contains collections of Economic Botany, showing vegetable products, processes of manufacture and uses to which put. The collections of Scientific Botany include the famous Torrey Herbarium, deposited by Columbia University. The conservatories contain tens of thousands of growing plants, etc. (For further information regarding Zoological and Botanical Gardens see Public Museums, page 42.)

CENTRAL PARK. Central Park extends from 59th Street north to 110th Street, and from Fifth Avenue west to Eighth Avenue. It is $2\frac{1}{2}$ miles long and one-half mile wide. The area comprises 879 acres of diversified woodland, meadow, lawn, lakes and ponds. There are $9\frac{1}{2}$ miles of carriage roads, $5\frac{1}{2}$ miles of bridle paths, and $28\frac{1}{2}$ miles of walks. The park has been beautified with handsome architecture, landscape gardening, statues and other works of sculpture. There are nineteen entrances. The park was begun under the mayoralty of Fernando Wood and has cost neraly \$20,000,000. The principal entrance to the park is at 59th Street and Fifth Avenue. This is called the Scholar's Gate, and is adorned by a colossal bust of Humboldt. The bust of Humboldt was unveiled in 1874, at which ceremony Prof. Louis Agassiz made a memorable address. Not far from this entrance is the Mall, which is a central place of concourse in the park, a broad promenade flanked by green lawns and arched by double rows of majestic elms. The Mall statues near the lower end are: A replica of Sunol's Columbus, which stands on the Prado in Madrid; Shakespeare, by J. Q. A. Ward, erected in 1872 on the 300th anniversary of the poet's birth; Burns and Scott, by Steele, presented by resident Scotchmen; Fitz-Greene Halleck, by Wilson MacDonald. On the lawns west of the Mall are Ward's "Indian Hunter" and Fratin's "Eagles and Goat." A colossal bust of Beethoven faces the music stand near the north end of the Mall where concerts are given in the summer. The Mall terminates at the terrace, which is the chief architectural adornment of the park. Broad flights of steps lead down to an esplanade, in the centre of which is the Bethesda Fountain, designed by Emma Stebbins. The menagerie at 64th Street and Fifth Avenue has collections of birds, animals and reptiles in buildings and cages surrounding the old arsenal. There are elephants, lions, tigers, bears, hippopotami, tapir, deer, elk, monkeys, eagles, ostriches and other birds. Northwest of the Art Museum, which stands in the park at 82d Street, is the upper Croton Reservoir. The water is brought from the High Bridge aqueduct over the Harlem River, coming from the Croton watershed 40 miles north of the city.

RIVERSIDE DRIVE AND PARK. Riverside Drive or Park lies along the high verge of the Hudson, between 71st and 158th Streets, and is now being extended farther up the Hudson. All along Riverside Avenue, which bounds the park inland, elegant houses with extensive lawns and gardens are seen. The road itself—a cluster of ample ways for pleasure, riding, driving and walking, separated by strips of turf from which stately trees rise, and extending for several miles—would have dignity of its own wherever it might lead through the city. This drive commands a position not paralleled in any of the avenues of the world. In many places the woods have been left in their native wildness. As long as daylight lasts, the walks and grass-grown hills are the playgrounds of myriads of children. Bordering the eastern line of the driveway is a row of fine modern houses quite unlike any other metropolitan dwellings. Outside the drive stands a copy of Houdin's statue of Washington given to the city by the school children. Beyond this come the bridged roadway at 96th Street, and the viaducts at 125th Street and 153d Street.

VAN CORTLANDT PARK. This park is at the extreme north end of the city, over 1,000 acres in extent, and is almost in an original condition of rocky woodland, lake and stream. There are golf links, polo grounds, ball grounds—and is the parade ground of the National Guard. In this park is the old Van Cortlandt mansion, built by Frederick Van Cortlandt in 1748. Nearby is the old saw and grist mill. Washington made his headquarters here on his way to the entry of New York in 1783, and the Washington Room is now a museum, containing many historical relics.

BROOKLYN.

PROSPECT PARK. Prospect Park, overlooking the populous wards of South Brooklyn and the New York Harbor, is nearly as large as Central Park, and is a worthy rival of it in attractiveness. It is in a wilder and more diversified state, although there are portions of it in the highest cultivation. It contains, among its ornaments, a statue to John Howard Payne, author of "Home, Sweet Home," and a bronze tablet to mark the site of the Battle of Long Island. The park contains many well arranged drives, and a winding lake, with boats, etc. From Lookout Hill a magnificent view is gained, reaching from the Atlantic horizon to the Palisades and the Orange Hills. In connection with the park are a series of boulevards 200 feet wide. Many more are contemplated, one to cross East River, at Blackwell's Island and connect with the Central Park or the Eastern Boulevard. The Park Plaza is a large paved space at the principal entrance to the park. Ornamental stone kiosks and four great granite pillars mark the entrance to the drive. The centre of the Plaza is marked by a memorial arch to the soldiers and sailors of the Civil War.

OTHER PARKS IN MANHATTAN AND BRONX.

Battery, foot of Broadway, 21 acres.

Bryant, 6th Avenue and West 42nd Street. 4 acres.

Carl Schurz, between Avenue B and East River, East 84th Street to East 89th Street. 12 $\frac{3}{4}$ acres.

City Hall Park, Broadway, Park Row, and Chambers Street. 8 acres.

Claremont, Teller Avenue, Belmont Street, Clay Avenue and 170th Street, in the 24th Ward. 38 acres.

Colonial, 145th to 155th Street, Bradhurst Avenue to Edgecomb Avenue. 12 $\frac{1}{2}$ acres.

Columbus, Bayard and Mulberry Streets. $2\frac{3}{4}$ acres.
Corlears Hook Park, Corlears and South Streets. $8\frac{1}{4}$ acres.
Crotona, Fulton Avenue, 3rd Avenue, and Arthur Avenue. $154\frac{1}{2}$ acres.
De Voe, Fordham Road, Sedgwick Avenue and 188th Street. $5\frac{3}{4}$ acres.
De Witt Clinton, 52nd to 54th Streets, North River. $7\frac{1}{4}$ acres.
Echo, Burnside and Tremont Avenues. 4 acres.
East River Park. See "Carl Schurz."
Fort Washington, Fort Washington Point, Hudson River. $40\frac{2}{3}$ acres.
Franz Sigel, Walton Avenue, 158th Street and Mott Avenue. $17\frac{1}{2}$ acres.
Hamilton Fish Park, Houston and Willett Streets. $3\frac{3}{4}$ acres.
Highbridge Park, 155th Street to Washington Bridge, West of Speedway. $75\frac{3}{4}$ acres.
Hudson, Hudson and Leroy Streets. $1\frac{3}{4}$ acres.
John Jay, 76th to 78th Streets, East River. 3 acres.
Macomb's Dam, Jerome Avenue, 162nd Street, Cromwell's Avenue, and Harlem River. 27 acres.
Madison Square, Broadway and 23rd Street. $6\frac{1}{2}$ acres.
Manhattan Square, Central Park West, 77th to 81st Streets. $17\frac{1}{2}$ acres.
Morningside, between Columbus and Amsterdam Avenues and West 110th and West 123rd Streets. 31 acres.
Mount Morris Park, between Madison and Mt. Morris Avenues and 120th and 124th Streets. 20 acres.
Pelham Bay Park, on Long Island Sound and East Chester Bay. 1,756 acres.
Poe Park, Kingsbridge Road and 192nd Street. $2\frac{1}{4}$ acres.
St. Gabriel's Park, 1st Avenue and 35th Street. 3 acres.
St. James, Jerome Avenue, Creston Avenue, and East 191st Street. $11\frac{3}{4}$ acres.
St. Mary's, 149th Street, St. Ann's and Robbins Avenues. 28 acres.
St. Nicholas, 130th to 141st Streets, bluffs facing St. Nicholas Avenue. 30 acres.
Seward, Canal and Jefferson Streets. 3 acres.
Stuyvesant, Rutherford Place and East 16th Street. $4\frac{1}{4}$ acres.
Thomas Jefferson, 111th Street, 1st Avenue, 114th Street, and Harlem River. $15\frac{1}{2}$ acres.
Tompkins Square, Avenue A and 7th Street. $10\frac{1}{2}$ acres.
Union Square, Broadway and 14th Street. 3 acres.
University Park, 181st Street and Sedgwick Avenue. $2\frac{3}{4}$ acres.
Washington Bridge, Sedgwick Avenue, Harlem River, Washington Bridge. $8\frac{1}{2}$ acres.
Washington Square, 5th Avenue and Waverly Place. 8 acres.

CHURCHES

There are more than a thousand churches in Greater New York. A list of convenient churches will be found in most hotels. The Saturday papers contain church announcements. Some churches of the several denominations in **Manhattan** are:

Baptist:

Calvary—West 57th Street, between 6th and 7th Avenues.
Judson Memorial—Washington Square. Open daily all day.

Christian Scientist:

First Church of Christ—Central Park West and 96th Street.

Congregational:

Broadway Tabernacle—Broadway and 56th Street.

Friends:

East 15th Street, corner Rutherford Place.

Jewish:

Temple Beth-El—Fifth Avenue and 76th Street.
Temple Emanu-El—Fifth Avenue and 43rd Street.

Lutheran:

St. James—Madison Avenue, corner East 73rd Street.

Methodist Episcopal:

John Street—44 John Street.
Madison Avenue—Madison Avenue, corner 60th Street.

Presbyterian:

Brick—Fifth Avenue and 37th Street.
Madison Square—Madison Avenue, and 24th Street. (Dr. Parkhurst's.)

Protestant Episcopal:

Cathedral of St. John the Divine—Cathedral Heights, West 113th Street.
Grace—Broadway and 10th Street.
Transfiguration ("Little Church Around the Corner")—No. 5 East 29th Street.
St. Bartholomew's—No. 348 Madison Avenue.
St. George's—7 Rutherford Place.
St. Paul's—Broadway and Vesey Street.
Trinity—Broadway and Rector Street.

Reformed:

Collegiate—Fifth Avenue and 48th Street. (Rev. Donald Sage Mackay.)
Madison Avenue—Madison Avenue and 57th Street.
Marble Collegiate—Fifth Avenue and 29th Street.

Roman Catholic:

St. Francis Xavier—West 16th Street and 6th Avenue.
St. Ignatius Loyola—Park Avenue and 84th Street.
St. Leo's—No. 11 East 28th Street.
St. Patrick's Cathedral—Fifth Avenue and 50th Street.

Unitarian:

All Souls—4th Avenue and 20th Street. (Rev. Thos. R. Slicer.)

Lenox Avenue—Lenox Avenue and 121st Street. (Rev. M. St. C. Wright.)

Messiah—Park Avenue and East 34th Street.

Universalist:

Divine Paternity—Central Park West and 76th Street.

Miscellaneous:

Salvation Army—No. 122 West 14th Street.

Society for Ethical Culture—Central Park West and 63rd Street. (Prof. Felix Adler.)

Volunteers of America—No. 397 Bowery.

Young Men's Christian Association—No. 215 West 23rd Street.

Young Women's Christian Association—No. 7 East 15th Street.

CHURCHES OF SPECIAL INTEREST.

(Alphabetical order.)

CATHEDRAL OF ST. JOHN THE DIVINE. The Cathedral of St. John the Divine is being built on Cathedral Heights, between **Morningside Park** and **Amsterdam Avenue**, and occupies a site between **110th and 113th Streets**. The cornerstone was laid in 1892, and it is estimated that the completion of the entire structure will require from forty to fifty years. The total cost will be in excess of \$6,000,000. The length of the Cathedral will be 520 feet, the width of front 172 feet, and across the transepts 290 feet. There will be seven towers, and the central tower will rise 445 feet from the floor to the top of the cross. It will be the finest ecclesiastical edifice in America. Surrounding the Choir will be seven Chapels of Tongues, in which Sabbath services will be held in seven different languages. The Choir will be surrounded with eight pillars, which will be mammoth monoliths of polished Maine granite, each one 54 feet 6 inches high and 6 feet in diameter, and weighing 120 tons. The Crypt is quarried out of solid rock and is completed. On the walls are hung two of the eight Barberini tapestries which will be used for the mural adornment of the completed Cathedral.

GRACE CHURCH AND RECTORY. Grace Church, set in the bend at **10th Street**, is one of the familiar and most highly cherished of the landmarks of **Broadway**. It is a beautiful structure of white limestone, with marble spire in the decorated Gothic, and was designed by James Renwick, the architect of St. Patrick's Cathedral. The interior is rich in sculptured decoration, and the memorial windows are exquisite examples of stained glass. The porch is a memorial, and so is each one of the ten bells in the chimes. The great bell bears the name of Rev. Thomas House Taylor, for thirty years the rector. In the rear is the Grace Memorial House, given by Levi P. Morton, in memory of his wife. In the rectory yard stands a great terra cotta vase which was brought from Rome, where it was discovered forty feet below the surface in excavations for St. Paul's Church. The sun dial has a pedestal fashioned from two of the pinnacles of Grace Church as first built, at Broadway and Rector Street, in 1809. The present edifice was completed in 1846. The church stands on ground which was owned by Henry Brevoort.

LITTLE CHURCH AROUND THE CORNER. This is the familiar name for the Church of the Transfiguration, on **East 29th Street**, near **Fifth Avenue**. It is said that in 1871, when Joseph Jefferson endeavored to arrange for the funeral of George Holland, a brother actor, at a church on Madison Avenue, the pastor said he could not hold burial services over the body of an actor. "But," he added, "there is a little church around the corner you can go to." "Then all honor to the little church around the corner," replied Jeffer-

son. "We will go there." From that time the church and its rector, Rev. George H. Houghton, were held in affectionate regard by the theatrical profession. Many actors have been buried from the church, among them Lester Wallack, Dion Boucicault and Edwin Booth. There is a memorial window given by an actors' club in memory of Booth. The churchyard is entered through a lich-gate. This is a roofed gate, not often seen in this country, but formerly common in Europe, when the custom was to rest the bier in the lich-gate during the reading of part of the burial service.

ST. PATRICK'S CATHEDRAL. This cathedral stands on **Fifth Avenue between 50th and 51st Streets.** Its projector was the late Archbishop John Hughes, and the architect was James Renwick. The cornerstone was laid on August 15, 1858, in the presence of 100,000 persons. On May 25, 1879, the structure was dedicated by Cardinal McClosky, who died in 1885. The cathedral is an example of the decorated and geometric style of Gothic architecture which prevailed in Europe from 1275 to 1400, and of which the cathedral of Cologne and the nave of Westminster are advanced exponents; and that although Europe can boast of larger ones, for purity of style, originality of design, harmony of proportions, beauty of material, and finish of workmanship, the New York cathedral stands unsurpassed. The building cost \$2,000,000. The seating capacity of the pews is 2,500. The plan is cruciform, the exterior length is 332 feet, breadth 174 feet, and the height of spires 330 feet. Of the seventy windows thirty-seven are figured, their subjects drawn from Scripture and the lives of the saints. The Archbishop's Throne is of carved French oak and has a magnificent Gothic canopy.

ST. PAUL'S CHAPEL. St. Paul's Church, which stands on **Broadway, between Fulton and Vesey Streets,** and nearly opposite the Post Office, is in reality only a chapel of Trinity Parish. It is the rear which is seen upon Broadway, the church originally facing toward the North River. St. Paul's is a cherished relic of Colonial days. Built in 1766, it is the only church edifice which has been preserved from the pre-Revolutionary period. After the burning of Trinity in 1776, St. Paul's became the parish church; here worshipped Lord Howe and Major Andre and the English midshipman who was afterwards King George IV. After his inauguration at Federal Hall in Wall Street, President Washington and both Houses of Congress came in solemn procession to St. Paul's where service was conducted by Bishop Provoost, Chaplain of the Senate. Washington was a regular attendant here, and Washington's pew remains to-day as it was then. Across the church is the pew which was reserved for the governor of the state, and was occupied by Governor Clinton. In the wall of the Broadway portico is the Montgomery Monument, in memory of General Montgomery.

TRINITY CHURCH. Trinity Church, on **Broadway, facing Wall Street,** is one of the chief architectural adornments of lower New York. It is of the Gothic style of architecture. The land on which the church now stands was the Old West India Company's Farm before the conquest of Manhattan by the English. It then became the King's farm, and in 1705 was granted to this, the Colonial Church. These lands embraced the entire tract lying along the North River between the present Vesey and Christopher Streets, which was given away to various institutions, but enough retained to yield an enormous income, which is spent in the maintenance of Old Trinity and six chaplets and for the support of many charities. The original church, built in 1697, and rebuilt in 1737, was destroyed in the great fire of 1776. In 1788 a new church was built which stood for half a century. It was then torn down and the present edifice erected in 1846. The bronze doors which adorn the entrance were given by William Waldorf Astor as a memorial of his father, John Jacob Astor. Their cost was \$40,000.

PUBLIC MUSEUMS

MANHATTAN, BRONX AND BROOKLYN

NEW YORK BOTANICAL GARDEN, in **Bronx Park**. Exhibits in the grounds: Hardy, herbaceous plants, shrubs, trees and natural woodlands; in the conservatories, tropical and warm temperate zone plants; in the museums, plant products, utilized in the arts, sciences and industries; illustrations of the natural families of plants; plants growing naturally within one hundred miles of New York; fossil plants. Museums, open free daily; in summer, 10 a. m. to 5 p. m.; in winter, 10 a. m. to 4.30 p. m. Conservatories, open free daily, 10 a. m. to 4 p. m. Take Third Avenue Elevated Railway to Bronx Park Botanical Garden; Subway passengers change to Elevated Railway at 149th Street; Harlem Division New York Central Railroad to Botanical Garden; Webster Avenue trolley cars to 200th Street. The grounds (250 acres) are open free to the public at all times.

AMERICAN MUSEUM OF NATURAL HISTORY, **Seventy-seventh Street from Columbus Avenue to Central Park West**. Collections of animals, woods, minerals, gems, and material illustrating the customs of various races. Open daily, 9 a. m. to 5 p. m.; Sunday, 1 to 5 p. m.; always free. Take Sixth or Ninth Avenue Elevated to 81st Street; Subway to 79th Street; Eighth Avenue or Columbus Avenue surface cars.

THE NEW YORK AQUARIUM, under the management of the New York Zoological Society, is in **Battery Park**. Exhibits: Living fishes, aquatic reptiles, marine mammals and invertebrates. Open daily, free, 9 a. m. to 5 p. m., April-October; 10 a. m. to 4 p. m., November-March; closed Monday forenoon. Take any Elevated, Surface or Subway line running to South Ferry.

THE NEW YORK ZOOLOGICAL PARK. Under the management of the New York Zoological Society. Over 5,000 living mammals, birds and reptiles, installed in comfortable captivity on 264 acres of woods and waters. Open daily, May 1 to Nov. 1, from 9 a. m. until half an hour before sunset; from Nov. 1 to May 1, from 10 a. m.; free, except on Monday and Thursday, when an admission fee of 25 cents is charged; free on all holidays. Take Bronx Park Express Subway Train to Terminus at West Farms (180th Street), or Third Avenue Elevated to Fordham Station; the entrances are reached by numerous surface cars.

THE METROPOLITAN MUSEUM OF ART, **82d Street and Fifth Avenue**. Exhibition of paintings, sculpture, Egyptian, Greek and Roman antiques, woodwork, metalwork, ceramics, etc. Open daily, in summer, 10 a. m. to 6 p. m.; in winter, 10 a. m. to 5 p. m.; Saturday to 10 p. m.; Sunday from 1 to 6 p. m.; free except on Monday and Friday, when admission fee of 25 cents is charged. Take Fifth Avenue stage; the Madison Avenue surface cars to 82nd Street; Third Avenue Elevated to 84th Street.

MUSEUM OF THE BROOKLYN INSTITUTE, **Eastern Parkway**. Collections in art, natural history and ethnology. Open daily, 9 a. m. to 6 p. m.; Thursday evening, 7.30 to 9.30 p. m.; free except Monday and Tuesday, when an admission fee of 25 cents is charged for adults, and 10 cents for children under six years of age. Take Subway express to Atlantic Avenue; St. Johns Place car from Atlantic Avenue or Borough Hall; Flatbush Avenue trolley from Brooklyn Bridge.

OTHER MUSEUMS AND ART GALLERIES.

NEW YORK HISTORICAL SOCIETY, **76th Street and Central Park West**. Paintings by old and modern masters (including 200 American portraits), Audubon's original water colors for natural history plates, Peter Marlé collection of miniatures and 200 Dutch elainiel paintings.

HISPANIC SOCIETY OF AMERICA, **Broadway and 155th St.**, was founded for the purpose of bringing the people of the United States interested in Spanish history, art and literature into closer relations with the Spanish and Portuguese people and those of the same blood in South America. Its museum and library are open to the public.

FINE ARTS BUILDING, **215 West 57th St.**, headquarters of Architectural League and Art Students' League. The semi-annual exhibitions of the National Academy of Design and the Water Color Society are held here.

NATIONAL ARTS CLUB AND GALLERIES, **14 Gramercy Park**.

ZOOLOGICAL GARDENS, **Central Park, entrance Fifth Ave. and 64th St.**

THE AMERICAN MUSEUM OF SAFETY, 29 West 39th Street. The American Museum of Safety, organized by private initiative, is maintained entirely by memberships and private contributions, and in the few years of its existence, it has demonstrated the importance and value of a clearing-house of information on the subjects of industrial safety and hygiene. In its three Departments of Safety, Industrial Hygiene and Mutuality, may be found actual devices for the protection of dangerous machines and processes, models, photographs, drawings, books and pamphlets—the most highly specialized information available for all who are interested in conserving human life through the prevention of accidents and lessening the ravages of occupational diseases. In addition to the collections of devices, drawings and photographs which may be studied at its rooms, the Museum carries on its educational work by means of free, illustrated lectures and by the organization of Safety Committees in shops and plants, thus furnishing the practical information needed in the work of accident prevention and health conservation. With a view to stimulating the invention and use of safety devices in all industries, and the promotion of hygiene and sanitation, three Gold Medals are annually awarded by the American Museum of Safety. Demonstrations of devices are made by its own staff. It is free to the public and open every day, excepting Sundays and holidays, between the hours of 9 a. m. and 5 p. m.; also in the evening, by special request, to classes, societies and other interested groups, who may not be able to visit the Museum during the day.

MONUMENTS AND STATUES IN MANHATTAN

- Arthur, Chester A.**, Madison Square.
Bartholdi Statue, see "Liberty," below, and "Special Points of Interest."
Beethoven, bronze bust, on a granite pedestal, 15 ft. high, Central Park, on the Mall; unveiled 1884.
Bolivar, equestrian statue of Simon Bolivar, the South American soldier and statesman, West 81st St. entrance to Central Park.
Bryant, William Cullen, Bryant Park, W. 42d St. and 6th Ave.
Burns, bronze statue, Central Park, on the Mall; unveiled 1880.
Cervantes, bust of Cervantes, author of "Don Quixote," in Central Park.
Columbus, marble statue in Central Park; unveiled 1892.
Commerce, bronze figure, Central Park, near the 8th Ave. and 59th St. entrance; unveiled 1865.
Conkling, bronze statue, Madison Square Park, cor. Madison Ave. and 23d St.
Cooper, Peter, statue opposite Cooper Institute.
Cox, bronze statue of the statesman S. S. Cox, erected by the letter-carriers, Astor Place.
De Peyster, Abraham, statue in Bowling Green.
Dodge, bronze statue of William E. Dodge, at Broadway, 6th Ave., and 36th St.; unveiled 1885.
Ericsson, statue of the inventor; on the Battery.
Farragut, bronze statue, Madison Square Park, near 5th Ave., and 26th St.
Franklin, bronze statue, Printing House Square; unveiled 1872.
Garibaldi, bronze statue, Washington Square; unveiled 1888.
Grant, Ulysses S., tomb, Riverside Drive and 123d St.; 160 feet high; dedicated April 27, 1897.
Greeley, bronze statue, at the front entrance of the Tribune Office, Park Row; unveiled 1890.
Greeley, Greeley Square. 33d St. and Broadway.
Hale, bronze statue of Nathan Hale, the martyr spy of the Revolution; City Hall Park, near Broadway and Mail St.; erected by the Sons of the Revolution in 1893.
Halleck, bronze statue, Central Park, on the Mall; unveiled 1877.
Hamilton, granite statue of Alexander Hamilton, Central Park, on the East Drive, above the Metropolitan Museum of Art.
Hancock, in Hancock Square, St. Nicholas Ave. and W. 124th St.
Heine, poet, Lorelei Fountain, Mott Ave. and 161st St.
Holley, bronze bust of Alexander Holley, Washington Square; unveiled 1890.
Hudson, Henry, 100 foot shaft. Spuyten Duyvil.
Humboldt, bronze bust, Central Park, near the 5th Ave. and 59th St. entrance.
Hunt, Richard M., Memorial, 5th Ave., opposite Lenox Library.
Indian Hunter, bronze figure, Central Park, near lower entrance to the Mall.
Irving, bronze bust, Bryant Park, on W. 40th St.; unveiled 1866.
Lafayette, bronze statue, Union Square, lower end of Park; unveiled 1876.

Liberty Enlightening the World, on Liberty Island, in the Harbor, copper statue, on granite and concrete pedestal; statue, 151 feet high; pedestal, 155 feet high; total height above low-water mark, 305 feet 11 inches; unveiled 1886. (See "Special Points of Interest," page 24.)

Lincoln, bronze statue, Union Square, southwest corner; unveiled 1868.

Maine, U. S. S., Memorial, National, Columbus Circle.

Martyrs' Monument, Trinity Churchyard, in memory of the American soldiers and sailors who died in the British prison ships in the Revolutionary war.

Mazzini, bronze bust, Central Park, on the West Drive.

Moore, bronze bust of Thomas Moore, the poet, Central Park, near the Pond and 5th Ave. entrance; unveiled 1880.

Morse, bronze statue of the inventor of the telegraph, Central Park, near 5th Ave. and 72d St. entrance; unveiled 1871.

Obelisk, Central Park, near the Metropolitan Museum of Art; brought from Egypt and erected 1881; granite, 70 feet long, and weighs 200 tons. (See "Special Points of Interest.")

Schiller, bronze bust, Central Park, in the Ramble; unveiled 1859.

Scott, bronze statue of Sir Walter Scott, Central Park on the Mall; unveiled 1872.

Seventh Regiment, bronze figure of a soldier of this regiment, to commemorate its dead in the civil war, Central Park, on the West Drive; unveiled 1874.

Seward, bronze statue, southwest corner of Madison Square Park; unveiled 1876.

Shakespeare, bronze statue, Central Park, at the lower end of the Mall; unveiled 1872.

Sherman, General, equestrian statue, 5th Ave. and 59th St.

Sigel, Franz, bronze monument, 106th St. and Riverside Drive; unveiled in October, 1907.

Sims, bronze statue of Dr. Marion Sims, Bryant Park, north side.

Soldiers' and Sailors' Monument, Riverside Drive.

Stuyvesant, marble effigy of Gov. Peter Stuyvesant, in the outer wall of St. Mark's Church.

The Pilgrim, bronze statue, Central Park, near E. 72d St. entrance.

Thorwaldsen, bronze statue, 59th St., facing 6th Ave.

Verdi, statue, Sherman Square.

Verrazano, statue, Battery Park.

Washington and Lafayette, bronze statue, W. 114th St., Morningside and Manhattan Aves.

Washington, bronze equestrian statue, Union Square, southeast side.

Washington, bronze statue, at the entrance to the Sub-Treasury Building, Wall St.; unveiled 1883.

Washington Marble Arch, Washington Square, at the foot of 5th Ave.

Water Gate, foot W. 110th St., where Henry Hudson landed.

Webster, bronze statue, Central Park, on the West Drive, near 72d St.

Worth, granite shaft, in honor of Major-General Worth, U. S. A., at Broadway, 5th Ave., and 25th St.; unveiled 1857.

FOREIGN CONSULATES

IN NEW YORK CITY

Argentine Republic , 80 Wall.	Japan , 60 Wall.
Austria-Hungary , 123 E. 17th.	Liberia , 24 Stone.
Belgium , 73 5th Ave.	Mexico , 32 Broadway.
Bolivia , 2 Stone.	Monaco , 35 S. William.
Brazil , 17 State.	Netherlands , 116 Broad.
Chili , 2 Rector.	Nicaragua , 66 Beaver.
China , 18 Broadway.	Norway and Sweden , 17 State.
Colombia , 24 State.	Panama , 11 Broadway.
Costa Rica , 1 Hanover Sq.	Paraguay , 309 Broadway.
Cuba , 82 Beaver.	Persia , 225 Fifth Ave.
Denmark , 8 Bridge.	Peru , 25 Broad.
Dominican Republic , 31 Broadway.	Portugal , 17 State.
Ecuador , 11 Broadway.	Russia , 22 N. Wash. Sq. & 27 B'way
France , 35 S. William.	Salvador , 42 Broadway.
German Empire , 11 Broadway.	Siam , 34 Nassau.
Great Britain , 2 and 17 State.	Spain , 18 Broadway.
Greece , 35 S. William.	Sweden , 17 State.
Guatemala , 2 Stone.	Switzerland , 18 Exchange Pl.
Hayti , 33 Broadway.	Turkey , 59 Pearl.
Honduras , 66 Beaver.	Uruguay , 17 Battery Pl.
Italy , 226 Lafayette.	Venezuela , 80 Wall.

HOSPITALS

IN MANHATTAN AND BRONX.

- American Vet.** (N. Y. University), 141 W. 54th St.
- Babies'**, 135 E. 55th St.
- Bellevue**, foot E. 26th St.
- Beth David**, 246 E. 82d St.; 82 2d Av.
- Beth Israel**, Jefferson & Cherry Sts.
- Bronx Eye and Ear Infirmary**, 404 E. 142d St.
- Central Islip State Hospital**, office 1 Madison Ave.
- City**, Blackwell's Island, office foot E. 26th St.
- Columbus**, 226 E. 20th St.
- Flower**, Ave. A, cor. E. 63d St.
- Fordham**, S. Boulevard, cor. Crotona Ave.
- Free Home for Incurable Cancer**, 426 Cherry St.
- French Benevolent Society**, 450 W. 34th St.
- General Memorial**, 2 W. 106th St.
- German**, E. 77th St., cor. Park Ave.
- German Poliklinik**, 137 Second Ave.
- Gouverneur**, Gouverneur Slip, cor. Front St.
- Hahnemann**, Park Ave., near E. 67th St.
- Harlem Eye, Ear, and Throat Inf.**, 2,099 Lexington Ave.
- Harlem**, Lenox Ave., cor. W. 136th St.
- Harlem Italian Sanitarium**, 281 Pleasant Ave.
- Har Moriah**, 138 Second St.
- Hospital for Consumptive Children**, W. 236th St., near Spuyten Duyvil Parkway.
- Hospital for Contagious Eye Diseases**, 341 Pleasant Ave.
- Hospital for Consumptives**, Blackwell's Island.
- Hospital for Deformities and Joint Diseases**, 1917 Madison Ave.
- Hospital of the N. Y. Am. Vet. Col.**, 337 E. 57th St.
- House of Relief**, 67 Hudson St.
- Italian Benevolent Institute**, 165 W. Houston St.
- Jewish Maternity**, 272 E. Broadway.
- J. Hood Wright Memorial Hospital**, W. 131st St., cor. Amsterdam Ave.
- King's Park State**, office 1 Madison Ave.
- Laura Franklin Free Hospital for Children**, 19 E. 111th St.
- Lebanon**, Westchester Ave., near Cauldwell Ave.
- Lincoln**, E. 141st St., cor. Concord Ave.
- Manhattan Eye, Ear and Throat**, 64th St., near 3d Ave.
- Manhattan Maternity**, 327 E. 60th St.
- Manhattan State Hospital**, Ward's Island.
- Metropolitan**, Blackwell's Island.
- Metropolitan Throat**, 351 W. 34th St.
- Minturn**, foot of E. 16th St.
- Misericordia**, 531 E. 86th St.
- Mt. Sinai**, 5th Ave., cor. E. 100th St.
- New Amsterdam Eye and Ear**, 230 W. 38th St.
- New York**, 8 W. 16th St.
- New York Eye and Ear Infirmary**, 218 Second Ave.
- New York Homoeopathic Medical College and Hospital**, Ave. A, near E. 63d St.
- New York Infirmary for Women and Children**, 321 East 15th St.
- New York Medical College and Hospital for Women**, 19 W. 101st St.
- New York Neurological Institute**, 149 E. 67th St.
- New York Ophthalmic and Aural Inst.**, 46 E. 12th St.
- New York Ophthalmic**, 201 E. 23d St.
- New York Orthopaedic**, 126 E. 59th St.
- New York Polyclinic**, 214 E. 34th St.
- New York Post-Graduate**, 301 E. 20th St.
- New York Red Cross**, office, 395 Central Park West.
- New York Skin and Cancer**, 330 2d Ave.
- New York Society for the Relief of the Ruptured and Crippled**, 135 E. 42d St.
- New York State Institute**, 119 W. 81st St.
- New York Throat, Nose, and Lung**, 229 E. 57th St.
- New York Veterinary**, 117 W. 25th St.
- Nursery and Child's**, 571 Lexington Ave.
- Our Lady of Grace**, 221 E. 79th St.
- Pasteur Institute**, 361 W. 23d St.
- Peoples**, 203 2d Ave.
- Philanthropin**, 2076 Fifth Ave.
- Presbyterian**, E. 70th St., near Park Ave.
- Riverside**, North Brother Island.
- Riverside (Reception)**, foot E. 16th St.
- Rockefeller Institute**, foot E. 66th St.
- Roosevelt**, W. 59th St., near 9th Ave.
- St. Andrew's Convalescent Hospital for Women and Children**, 213 E. 17th St.
- St. Ann's Maternity**, 130 E. 69th St.
- St. Elizabeth's**, 415 W. 51st St.
- St. Francis**, E. 142d St., cor. Brook Ave.
- St. John's Guild Floating Hospital**, 103 Park Ave.
- St. Joseph's**, E. 142d St., cor. Brook Ave.
- St. Joseph's Infirmary**, E. 82d St., near Madison Ave.
- St. Lawrence**, 447 W. 163d St.
- St. Luke's**, Amsterdam Ave., cor. W. 113th St.
- St. Mark's**, 177 2d Ave.
- St. Mary's Free Hospital for Children**, 407 W. 34th St.
- St. Vincent's**, 157 W. 11th St.
- Sanitarium for Hebrew Children**, 356 2d Ave.
- Seaside of St. John's Guild**, office, 103 Park Ave.
- Seton** (for Consumptives), W. 236th St., near Spuyten Duyvil Parkway.
- Sloane Maternity**, 447 W. 59th St.
- Society of Lying-in Hospital**, E. 17th St., cor. 2d Ave.
- Sydenham**, 339 E. 116 St.
- United States Marine**, 109 Broad St.
- Vanderbilt Clinic**, 60th St. and Amsterdam Ave.
- Volunteer**, 93 Gold St.
- Washington Heights**, 552 W. 165th St.
- Willard Parker**, foot E. 16th St.
- Woman's**, 110th St., near Amsterdam Ave.
- Woman's Infirmary and Maternity Home**, 359 W. 42d St.

TELEGRAPH RATES

FROM NEW YORK

NIGHT LETTERS of 50 words or less, address and signature free, filed before midnight, are transmitted during the night and delivered the next morning at the same rate as that shown for "Day telegrams of 10 words."

DAY LETTERS of 50 words or less, address and signature free, filed at any hour during the day, are transmitted and delivered subject to the priority of Day telegrams. Rates for Day Letters are one-half higher than rates for Night Letters.

Words above 50 in Night Letters or Day Letters are one-fifth the 50-word rate for each additional 10 or fraction of 10 words.

PLACES.	TELEGRAMS.				PLACES.	TELEGRAMS.			
	10 Words.		50 Words.			10 Words.		50 Words.	
	Day.	Night.	Day Letter.	Night Letter.		Day.	Night.	Day Letter.	Night Letter.
Alabama	\$0.60	\$0.50	\$0.90	\$0.60	Montana	\$0.75	\$0.60	\$1.13	\$0.75
Alaska	2.40	2.40	on app	licat'n	Nebraska	60	50	90	60
	to	to			Nevada	1.00	1.00	1.50	1.00
Arizona	10.45	10.45	1.50	1.00	New Brunswick..	50	40	75	50
	1.00	1.00			Newfoundland ..	1.10	1.00	on app	licat'n
Arkansas	60	50	90	60	New Hamp.....	35	25	53	35
Brit. Colum. . .	1.00	1.00	on app	licat'n	New Jersey.....	25	25	38	25
	to	to			New Mexico.....	75	60	1.13	75
California	4.60	4.60	1.50	1.00	New York.....	35	25	53	35
	1.00	1.00			North Carolina..	50	40	75	50
Colorado	75	60	1.13	75	North Dakota...	75	60	1.13	75
Connecticut ..	25	25	38	25	Nova Scotia....	50	40	75	50
Delaware	30	25	45	30	Ohio	40	30	60	40
Dist. of Colum..	30	25	45	30	Oklahoma	75	60	1.13	75
Florida	60	50	90	50	Ontario	50-60	40-50	75-90	50-60
Georgia	60	50	90	50	Oregon	1.00	1.00	1.50	1.00
Idaho	1.00	1.00	1.50	1.00	Pennsylvania ...	25-40	25-30	38-45	25-40
Illinois	50	40	75	50	Quebec	50	40	75	50
Indiana	50	40	75	50	Rhode Island....	30	25	45	30
Iowa	60	50	90	60	South Carol na..	60	50	90	60
Kansas	60	50	90	60	South Dakota...	75	60	1.13	75
Kentucky	50	40	75	50	Tennessee	50	40	75	50
Louisiana	60	50	90	60	Texas	75	60	1.13	75
Maine	35-40	30	60	40	Utah	75	60	1.13	75
Manitoba	75	60	1.13	75	Vermont	35	25	53	35
Maryland	35	25	53	35	Virginia	50	40	75	50
Massachusetts ..	30	25	45	30	Washington	1.00	1.00	1.50	1.00
Michigan	40-50	40	75	50	West Virginia...	40	30	60	40
Minnesota	60	50	90	60	Wisconsin	60	50	90	60
Mississippi	60	50	90	60	Wyoming	75	60	1.13	75
Missouri	50-60	40-50	75-90	50-60	Yukon	4.25	4.25	on app	licat'n

CABLE RATES TO FOREIGN COUNTRIES FROM NEW YORK.

The address and signature are included in the chargeable matter, and the length of words is limited to fifteen letters. When a word is composed of more than fifteen letters, every additional fifteen or the fraction of fifteen letters will be counted as a word.

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"CABLE LETTERS" (\$1.50 for 20 plain English words to London or Liverpool, from where they will be delivered free by mail to all parts of the world) and "WEEK-END CABLE LETTERS" (\$1.50 for 30 plain English words, sent only on Saturday, reaching London on Tuesday, and delivered free by mail only in Great Britain) are transmitted by the Western Union Telegraph Co. Either of these "Cable Letters" will be telegraphed to various parts of the world by paying in addition the regular rate from England. Full information regarding them will be furnished at the offices of the company.

	Per Word.		Per Word.		Per Word		Per Word.
Egypt*	\$.50	Germany*	.25	New South Wales	.66	Servia.....	.34
Argentine Repub.	.85	Gibraltar.....	.43	New Zealand.....	.66	South Africa*...	.86
Austria.....	.32	Great Britain*..	.25	Norway.....	.35	Spain.....	.38
Belgium*	.25	Greece.....	.36	Panama.....	.50	St. Thomas.....	.96
Bermuda.....	.42	Guatemala.....	.55	Paraguay.....	.85	Sweden.....	.38
Bolivia.....	.85	Havana.....	.15	Peru.....	.85	Switzerland.....	.30
Brazil.....	.85 to 1.60	Haiti.....	1.05 to 1.55	Philippine Is. (Lu-		Sydney (N.S.W.)	.66
Bulgaria.....	.35	Holland.....	.25	zon, Manila, etc.)	1.12	Tangier.....	.45
Callao (Peru)....	.85	Honolulu .....	.47	Other islands....	1.31	Transvaal.....	.86
Ceylon*	.76	Hungary.....	.32	Porto Rico.....	.75	Trinidad.....	.98
Chili .....	.85	India* .....	.74	Portugal* .....	.39	Turkey (Europe).	.36
China.....	1.22	Italy.....	.31	Queensland.....	.66	Turkey (Asia)...	.45
Colon.....	.50	Jamaica.....	.48	Roumania.....	.34	Uruguay.....	.85
Cyprus* .....	.50	Japan.....	1.33	Russia (Europe) .	.43	Venezuela.....	1.00
Denmark.....	\$.35	Melbourne, Vic..	.66	Russia (Asia) ..	\$.50	Vera Cruz, \$1.75, 10wds.	
Ecuador.....	1.00	Mexico City, \$1.75, 10wds		Santo Domingo... 1.32		Victoria (Aust'l'a)	.66
France* .....	.25	Nassau (Bahamas)	.35	Scotland* .....	.25		

DISTANCES FROM NEW YORK TO CITIES IN UNITED STATES

The distance herein shown is that via the quickest route and the lines carrying the bulk
of the mails.

CITIES IN UNITED STATES.	Miles.	CITIES IN UNITED STATES.	Miles.	CITIES IN UNITED STATES.	Miles.
Albany, N. Y.	143	Duluth, Minn.	1,522	Portland, Me.	348
Albuquerque, N. Mex.	2,260	El Paso, Tex.	2,290	Portland, Ore.	3,248
Alliance, Neb.	1,875	Fargo N. Dak.	1,613	Prescott, Ariz.	2,861
Amarillo, Tex.	1,920	Ft. Worth, Tex.	1,738	Providence, R. I.	186
Atlanta, Ga.	845	Galveston, Tex.	2,182	Reno, Nev.	2,939
Atlantic City, N. J.	150	Grand Rapids, Mich.	940	Richmond, Va.	340
Augusta, Me.	410	Greensboro, N. C.	515	Roanoke, Va.	452
Baltimore, Md.	185	Harrisburg, Pa.	196	St. Louis, Mo.	1,060
Birmingham, Ala.	1,043	Hartford, Ct.	110	St. Paul, Minn.	1,370
Bismarck, N. Dak.	1,818	Helena, Mont.	2,500	Salt Lake City, Utah.	2,480
Boise, Idaho	2,783	Hot Springs, Ark.	1,470	San Francisco, Cal.	3,183
Boston, Mass.	233	Indianapolis, Ind.	820	Santa Fe, N. Mex.	2,211
Bristol, Tenn.	604	Ishpeming, Mich.	1,354	Savannah, Ga.	844
Buffalo, N. Y.	438	Jackson, Miss.	1,501	Seattle, Wash.	3,184
Burlington, Vt.	303	Jacksonville, Fla.	979	Sheridan, Wyo.	2,209
Butte, Mont.	2,498	Kansas City, Mo.	1,342	Shreveport, La.	1,456
Cape May, N. J.	173	Little Rock, Ark.	1,409	Sioux Falls, S. Dak.	1,507
Carson City, Nev.	3,016	Los Angeles, Cal.	3,106	Spokane, Wash.	2,845
Charleston, S. C.	736	Louisville, Ky.	867	Springfield, Ill.	1,017
Charleston, W. Va.	612	Manchester, N. H.	290	Springfield, Mass.	136
Chattanooga, Tenn.	846	Memphis, Tenn.	1,286	Superior, Wis.	1,427
Cheyenne, Wyo.	1,966	Milwaukee, Wis.	1,046	Syracuse, N. Y.	290
Chicago, Ill. (N. Y. Cent.)	960	Mobile, Ala.	1,229	Tacoma, Wash.	3,225
Chicago, Ill. (Penn. R. R.)	908	Montpelier, Vt.	339	Tampa, Fla.	1,190
Cincinnati, O.	752	Newark, N. J.	9	Topeka, Kan.	1,409
Cleveland, O.	621	New Orleans, La.	1,365	Trenton, N. J.	57
Columbus, O.	632	Norfolk, Va.	346	Vicksburg, Miss.	1,282
Concord, N. H.	308	Ogden, Utah	2,443	Vinita, Okla.	1,422
Cumberland, Md.	362	Oklahoma, Okla.	1,604	Washington, D. C.	225
Deadwood, S. Dak.	2,053	Omaha, Neb.	1,455	Wheeling, W. Va.	506
Denver, Col.	1,982	Parkersburg, W. Va.	600	Wichita, Kan.	1,565
Des Moines, Ia.	1,318	Pendleton, Ore.	3,017	Wilmington, Del.	116
Detroit, Mich.	798	Philadelphia, Pa.	90	Wilmington, N. C.	707
		Pittsburgh, Pa.	2,724		
			439		

DISTANCES AND MAIL TIME TO FOREIGN CITIES FROM THE CITY OF NEW YORK

By Postal Route to—	Statute Miles.	Days	By Postal Route to—	Statute Miles.	Days
Adelaide, via Vancouver	12,845	31	Havana	1,366	3
Alexandria, via London	6,150	12	Hong Kong, via San Francisco	10,590	27
Amsterdam, " "	3,985	8	Honolulu, via San Francisco	5,645	12
Antwerp, " "	4,000	8	Liverpool	3,540	7
Athens, " "	5,655	11	London	3,740	7
Bahia, Brazil	5,870	14	Madrid, via London	4,925	9
Bangkok, Siam, via San Fran.	12,900	43	Melbourne, via Vancouver	12,265	30
Bangkok, Siam, via London	13,125	41	Mexico City (railroad)	3,750	5
Batavia, Java, via London	12,800	34	Panama	2,355	6
Berlin	4,385	8	Paris	4,020	8
Bombay, via London	9,765	22	Rio de Janeiro	6,204	17
Bremen	4,235	8	Rome, via London	5,030	9
Buenos Ayres	8,045	24	Rotterdam, via London	3,935	8
Calcutta, via London	11,120	24	St. Petersburg, via London	5,370	9
Cape Town, via London	11,245	25	San Juan, Porto Rico	1,730	6
Constantinople, via London	5,810	11	Shanghai, via Vancouver	9,920	25
Florence, via London	4,800	9	Shanghai, via London	14,745	37
Glasgow	3,370	8	Stockholm, via London	4,975	10
Greerown, via New Orleans	2,815	7	Sydney, via Vancouver	11,570	29
Halifax, N. S.	645	2	Valparaiso, via Panama	5,915	22
Hamburg, direct	4,820	9	Vienna	4,740	9
" via London	4,340	9	Yokohama, via San Francisco	7,345	20

POSTAL INFORMATION

GENERAL POST-OFFICE, Broadway and Park Row.

Domestic Postage. Applies also to mail matter sent to Hawaii, Porto Rico, Guam, Philippines, Tutuila, Cuba, Canada, Mexico, Shanghai, (China), Republic of Panama and the "Canal Zone" on the Isthmus of Panama. Note, however, that sealed packages, other than letters in their customary form, are unmailable to Canada, Cuba, Mexico and the Republic of Panama.

Postal Cards, 1 cent each; double or "reply" postal cards, 2 cents each. Private postal cards, under certain restrictions as to size and as to weight of paper, are carried to all parts of the United States if a 1 cent stamp is affixed.

All Letters, 2 cents for each ounce or fraction thereof.

Local or "Drop" Letters, in the United States, that is for the city or town where deposited, 2 cents per ounce or fraction thereof where the carrier system is adopted, and 1 cent per ounce or fraction thereof where there is no carrier system.

First Class. Letters and all other written matter, including all productions by the typewriter, whether sealed or unsealed, and all other matter sealed, nailed, sewed or fastened in any manner so that it cannot be easily examined, 2 cents for each ounce or fraction thereof. Limit of weight 4 pounds.

Second Class. Newspapers and periodicals which have been entered at the post-office as second-class matter can be mailed by the public at the rate of 1 cent for each 4 ounces or fraction thereof when not sealed, and when fully prepaid.

Third Class. Printed matter, in unsealed wrappers only, 1 cent for each 2 ounces or fraction thereof, which must be fully prepaid.

This includes printed books, circulars, engravings, corrected proof sheets and manuscript copy accompanying the same.

Reproductions by the electric pen, hektograph, or similar process, easy of recognition as such, are admissible as third-class matter, provided they are presented for mailing at the post-office windows and in the minimum number of twenty identical copies. Limit of weight 4 pounds except for a single book which may weigh more.

Fourth Class. All mailable matter not included in the three preceding classes and not in its nature perishable or likely to deface or injure the contents of the mails, which is so prepared for mailing as to be easily withdrawn from the wrapper and examined, 1 cent per ounce or fraction thereof (the rate on seeds, roots, bulbs, cuttings, scions and plants is 1 cent for each 2 ounces or fraction thereof, except to Canada, the rate to which is 1 cent per ounce). Limit of weight 4 pounds. Full prepayment compulsory.

Domestic Postal Money Order Rates. Apply also to money orders drawn on Hawaii, Porto Rico, Guam, Philippine Islands, Tutuila, Samoa, Bahamas, Bermuda, Cuba, Canada, the "Canal Zone" on the Isthmus of Panama, United States Postal Agency at Shanghai (China), British Guiana, Newfoundland, British Honduras, Mexico, and in certain Islands in the West Indies:

Not over	\$ 2.50	3c.	\$20.01 to \$30.00	12c.	\$50.01 to \$60.00	20c.
\$ 2.51 to	5.00	5c.	30.01 to 40.00	15c.	60.01 to 75.00	25c.
5.01 to	10.00	8c.	40.01 to 50.00	18c.	75.01 to 100.00	30c.
10.01 to	20.00	10c.				

Registration. Registration on first, second, third and fourth-class matter, 10 cents for each letter or package in addition to regular postage, fully prepaid, at any post-office in the United States. Each package must bear the name and address of the sender, and, if requested, a receipt will be returned from the person to whom addressed.

Special Delivery to all Parts of the United States. Rates on special delivery letters and packages, 10 cents each in addition to regular postage. This entitles the letter or package to immediate delivery, by special messenger. Regular special delivery stamps are sold at post-offices and had better be used, but ordinary postage stamps to the amount of 10 cents may be used in place of the regular special delivery stamp, and, when used, the words "Special Delivery" should be written below the stamps. Special Delivery at carrier offices extends to limits of carriers' routes. At non-carrier offices it extends to one mile from post-office.

Foreign Postage, Except as Mentioned Under Domestic Postage. Letters to foreign countries (except Great Britain and Ireland, Newfoundland, and via direct steamer to Germany), 5 cents for the first ounce or fraction thereof, and 3 cents for each additional ounce or fraction thereof. Single postal cards, 2 cents; double postal cards, 4 cents; newspapers and other printed matter, per 2 ounces, 1 cent; com-

mercial papers, first 10 ounces or fraction thereof, 5 cents; every additional two ounces, 1 cent. Samples of merchandise, first 4 ounces or less, 2 cents; each additional 2 ounces or fraction thereof, 1 cent. Registration fee, 10 cents.

Letters to Great Britain and Ireland, Newfoundland, and via direct steamer to Germany, 2 cents for each ounce or fraction thereof.

Foreign Postal Money Order Rates. Payable in Apia, Austria, Belgium, Bolivia, Cape Colony, Costa Rica, Denmark, Egypt, Germany, Great Britain, Honduras, Hong Kong, Hungary, Italy, Japan, Liberia, Luxemburg, New South Wales, New Zealand, Orange River Colony, Peru, Portugal, Queensland, Russia, Salvador, South Australia, Switzerland, Tasmania, the Transvaal, Uruguay and Victoria:

Not over	\$ 2.50	10c.	\$15.01 to	\$20.00	35c.	\$60.01 to	\$70.00	70c.
\$ 2.51 to	5.00	15c.	20.01 to	30.00	40c.	70.01 to	80.00	80c.
5.01 to	7.50	20c.	30.01 to	40.00	45c.	80.01 to	90.00	90c.
7.51 to	10.00	25c.	40.01 to	50.00	50c.	90.01 to	100.00	\$1.00
10.01 to	15.00	30c.	50.01 to	60.00	60c.			

Payable in any foreign country other than those enumerated above, and except as mentioned under Domestic Postal Money Order Rates:

Not over	\$ 10.00	10c.	\$40.01 to	\$50.00	50c.	\$70.01 to	\$80.00	80c.
\$10.01 to	20.00	20c.	50.01 to	60.00	60c.	80.01 to	90.00	90c.
20.01 to	30.00	30c.	60.01 to	70.00	70c.	90.01 to	100.00	\$1.00
30.01 to	40.00	40c.						

FOREIGN COINS AND U. S. MONEY

VALUE OF FOREIGN COINS IN UNITED STATES MONEY.

(Proclaimed by the Secretary of the Treasury October 1, 1911.*)

COUNTRY.	Stan'd	Monetary Unit.	Value in U. S. Gold Dollar.	Coins.
Argent. R..	Gold.	Peso	\$0.96,5	Gold: Argentine (\$4.82,4) and ½ Argentine. Silver: peso and divisions.
Austria-H.	Gold.	Crown .....	.20,3	Gold: 10 and 20 crowns. Silver: 1 and 5 crowns.
Belgium ..	Gold.	Franc .....	.19,3	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia ...	Gold.	Boliviano .....	.38,9	Gold (†). Silver: boliviano and divisions.
Brazil	Gold.	Milreis .....	.54,6	Gold: 5, 10, and 20 milreis. Silver: ½, 1, and 2 milreis.
Canada ...	Gold.	Dollar	1.00	
Cent. Am..	Silver.	Peso† .....	.38,3	Silver: peso and divisions.
Chili	Gold.	Peso .....	.36,5	Gold: escudo (\$1.82,5), doubloon (\$3.65), and condor (\$7.30). Silver: peso and divisions.
China	Silver.	Tael ... { Shanghai { Haikwan { Canton..	.57,4 .64,0 .62,7	
Colombia ..	Gold.	Dollar	1.00	Gold: condor (\$9.64,7) and double-condor. Silver: peso.
Costa Rica.	Gold.	Colon .....	.46,5	Gold: 2, 5, 10, and 20 colons (\$9.30,7). Silver: 5, 10, 25, and 50 centimos.
Denmark ..	Gold.	Crown .....	.26,8	Gold: 10 and 20 crowns.
Ecuador ..	Gold.	Sucre .....	.48,7	Gold: 10 sucres (\$4.86,65). Silver: sucre and divisions.
Egypt	Gold.	Pound (100 piasters)	4.94,3	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
France	Gold.	Franc .....	.19,3	Gold: 5, 10, 20, 50, and 100 frs. Silver: 5 frs.
Germany ..	Gold.	Mark .....	.23,8	Gold: 5, 10, and 20 marks.
Gt. Britain	Gold.	Pound sterling....	4.86,6½	Gold: sovereign (pound sterling) and ½ sovereign.
Greece	Gold.	Drachma .....	.19,3	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Haiti	Gold.	Gourde .....	.96,5	Gold: 1, 2, 5, and 10 gourdes. Silver: gourde and divisions.
India	Gold.	Pound sterling \$....	4.86,6½	Gold: sov. (\$4.86,65). Silver: rupee and divisions.

* The coins of silver-standard countries are valued by their pure silver contents, at the average market price of silver. † Not including Costa Rica. ‡ Gold standard adopted Dec. 31, 1908; 12½ Bolivianos equal the pound sterling or Peruvian pound (4.886½). § The sovereign is the standard coin of India, but the rupee (\$0.324 1-3) is the current coin at 15 to the sovereign.

COUNTRY.	Stan'd	Monetary Unit.	Value in U. S. Gold Dollar.	Coins.
Italy	Gold.	Lira .....	.19,3	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan	Gold.	Yen .....	.49,8	Gold: 5, 10, and 20 yen. Silver: 10, 20, and 50 sen.
Mexico	Gold.	Peso *	.49,8	Gold: 5 and 10 pesos. Silver: dollar (or peso)** and divisions.
Neth'lands	Gold.	Florin .....	.40,2	Gold: 10 florins. Silver: 2½, 1 florin and divisions.
N'foundl'd	Gold.	Dollar	1.01,4	Gold: 2 dollars (\$2.02,8).
Norway ...	Gold.	Crown .....	.26,8	Gold: 10 and 20 crowns.
Panama ...	Gold.	Balboa	1.00,0	Gold: 1, 2½, 5, 10, and 20 balboas. Silver: peso and divisions.
Peru	Gold.	Libra	4.86,6½	Gold: ½ and 1 libra. Silv.: sol and div.
Portugal ..	Gold.	Milreis	1.08,	Gold: 1, 2, 5, and 10 milreis.
Russia	Gold.	Ruble .....	.51,5	Gold: 5, 7½, 10, and 15 rubles. Silver: 5, 10, 15, 20, 25, 50, and 100 copecks.
Spain	Gold.	Peseta .....	.19,3	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden	Gold.	Crown .....	.26,8	Gold: 10 and 20 crowns.
Switz'land	Gold.	Franc .....	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Turkey ...	Gold.	Piaster .....	.04,4	Gold: 25, 50, 100, 250, and 500 piasters.
Uruguay ...	Gold.	Peso	1.03,4	Gold: peso. Silver: peso and divisions.
Venezuela ..	Gold.	Bolivar .....	.19,3	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

* Seventy-five centigrams fine gold. ** Value in Mexico .498.

TABLE SHOWING THE VALUE OF FOREIGN COINS AND PAPER NOTES IN AMERICAN MONEY BASED UPON THE VALUES EXPRESSED IN THE ABOVE TABLE.

No.	British £ Sterling.	German Mark.	French Franc. Ital'n Lira	Chinese Tael (Haikwan)	Dutch Florin.	Jap. Yen. Mex. Peso.	Russian Gold Ruble.	Austrian Crown.
1	\$4.86,6½	\$0.23,8	\$0.19,3	\$0.65,3	\$0.40,2	\$0.49,8	\$0.51,5	\$0.20,3
2	9.73,3	0.47,6	0.38,6	1.30,6	0.80,4	0.99,6	1.03	0.40,6
3	14.59,9½	0.71,4	0.57,9	0.95,9	1.20,6	1.49,4	1.54,5	0.60,9
4	19.46,6	0.95,2	0.77,2	2.61,2	1.60,8	1.99,2	2.06	0.81,2
5	24.33,2½	1.19	0.96,5	3.26,5	2.01	2.49,0	2.57,5	1.01,5
6	29.19,9	1.42,8	1.15,8	3.91,8	2.41,2	2.98,8	3.09	1.21,8
7	34.06,5½	1.66,6	1.35,1	4.57,1	2.81,4	3.48,6	3.60,5	1.42,1
8	38.93,2	1.90,4	1.54,4	5.22,4	3.21,6	3.98,4	4.12	1.62,4
9	43.79,8½	2.14,2	1.73,7	5.87,7	3.61,8	4.48,2	4.63,5	1.82,7
10	48.66,5	2.38	1.93	6.53,0	4.02	4.98,0	5.15	2.03
20	97.33	4.76	3.86	13.06,0	8.04	9.96,0	10.30	4.06
30	145.99,5	7.14	5.79	19.59,0	12.06	14.94,0	15.45	6.09
40	194.66	9.52	7.72	26.12,0	16.08	19.92,0	20.60	8.12
50	243.32,5	11.90	9.65	32.66,0	20.10	24.90,0	25.75	10.15
100	486.65	23.80	19.30	65.32,0	40.20	49.80,0	51.50	20.30

WEIGHTS AND MEASURES

I. UNITED STATES SYSTEM OF MEASURES AND WEIGHTS COMPARED WITH THE METRIC SYSTEM.

1. Linear Measures.

1 mile = 8 frlgs = 80 chains = 320 perches = 5280 ft = 1609.344 m
 1 frlg = 10 chains = 40 perches = 660 ft = 201.168 m
 1 chain = 4 perches = 66 ft = 20.1168 m
 1 perch = 16½ ft = 5.0292 m

1 chain = 100 links
 1 link = 7.92 inches = 0.201168 m

1 yard = 3 feet = 36 inches = 0.9144 m
 1 foot = 12 inches = 0.3048 m
 1 inch = 0.0254 m

2. Surface Measures.

1 sq. mile = 640 acres
 1 acre = 10 sq. chains = 160 sq. perches = 43560 sq. ft = 40.4694 ar

3. Measures of Capacity.

A.—DRY MEASURE.

1 bushel = 2150.42 cub. inches
1 bushel = the volume of 77.627 lbs. of distilled water at 4° C
Legal: 1 liter = 0.908 quart
1 bushel = 4 pecks = 8 gallons = 32 qts = 35.24229 l
1 peck = 2 gallons = 8 qts = 8.81057 l
1 gallon = 4 qt = 4.40528 l
1 qt = 1.10132 l

1 cub. foot = 7.48 gallon = 28.315 l = 62.42 lbs of water at 60° F

B.—LIQUID MEASURE.

1 gallon = 231 cub. inches
1 gallon = the volume of 8.3388822 lbs. = 58373 troy grains of distilled water at 4° C
Legal: 1 liter = 1.0567 qt = 0.26417 gallon
1 gallon = 4 quarts = 8 pints = 32 gills = 3.78544 l
1 quart = 2 pints = 8 gills = 0.94636 l
1 pint = 4 gills = 0.47318 l
1 gill = 0.118295 l

4. Weights.

1 grain troy = 0.0648004 gram
1 lb. troy = 0.822857 lb. avoirdupois
1 lb. avoirdupois = 7000 grains troy = 1.215279 lbs. troy

A.—AVOIRDUPOIS WEIGHTS.

1 ton (long) = 20 cwt = 2240 lbs = 1016.070 Kg
1 cwt = 112 lbs = 50.8035 Kg

1 lb = 16 oz = 256 drams = 768 scruples = 7680 grains = 453.603 grams
1 oz = 16 drams = 48 scruples = 480 grains = 28.350 grams
1 dram = 3 scruples = 30 grains = 1.772 grams
1 scruple = 10 grains = 0.5906 gram

B.—TROY WEIGHT FOR DRUGS.

1 lb = 12 oz = 96 drams = 288 scruples = 5760 grains = 373.2503 grams
1 oz = 8 drams = 24 scruples = 480 grains = 31.1042 grams
1 dram = 3 scruples = 60 grains = 3.888025 grams
1 scruple = 20 grains = 1.296008 grams
1 grain = 0.064804 gram

C.—TROY WEIGHT FOR JEWELS AND PRECIOUS METALS.

1 lb = 12 oz = 24 carats = 240 pwts = 5760 grains = 373.2503 grams
1 oz = 2 carats = 20 pwts = 480 grains = 31.1042 grams
1 carat = 10 pwts = 240 grains = 15.5521 grams
1 pennyweight = 24 grains = 1.55521 grams
1 grain = 0.0648004 gram

II. THE METRIC SYSTEM OF WEIGHTS AND MEASURES COMPARED WITH THE UNITED STATES SYSTEM.

1. Linear Measures.

1 m = $\frac{1}{10^7}$ part of an earth meridian quadrant.

1 Meter (m) = 10 Decimeters (dm) = 100 Centimeters (cm) = 1,000 Millimeters (mm) = 0.1 Dekameter (Dm) = 0.01 Hektometer (Hm) = 0.001 Kilometer (Km) = 0.0001 Myriameter (Mm)

1 Mm = 10 Km = 100 Hm = 1000 Dm = 10000 m = 6.214 miles
1 Km = 10 Hm = 100 Dm = 1000 m = 3,280.87 feet
1 Hm = 10 Dm = 100 m = 328.09 feet
1 Dm = 10 m = 32.81 feet

1 m = 10 dm = 100 cm = 1000 mm = 39.3704 inches
1 dm = 10 cm = 100 mm = 3.9370 inches
1 cm = 10 mm = 0.3937 inches

2. Surface Measures.

1 Ar (a) = 1 square dekameter (sq. Dm) = 100 square meters (sq. m) = 0.01 hektar (ha)

1 Ar = 1 □ Dm = 100 □ m

1 □ Km = 109 HA = 10,000 A = 1,000,000 □ m = 247.10 acres

1 HA = 100 A = 10,000 □ m = 2.471 acres

1 A = 100 □ m = 1076.37 sq. feet

3. Measures of Capacity.

1 liter (l) = 1 cubic decimeter (cbdm) = 1,000 cubic centimeters (ccbm)
= 0.001 cubic meter (cbm) = 10 deciliters (dl) = 100 centiliters (cl) = 0.01
hektoliter (hl)

1 Hl = 10 Dl = 100 l = 1,000 dl = 10,000 cl = 26.42 gall
1 Dl = 10 l = 100 dl = 1,000 cl = 2.642 gall
1 l = 10 dl = 100 cl = 0.264 gall

4. Weights.

1 kilogram (kg) = 100 dekagrams (Dg) = 1000 grams (g)
1 gram = 10 decigrams (dg) = 100 centigrams (cg) = 1,000 milligrams
(mg)

1 ton (long) = 1,000 Kg = 100,000 Dg = 1,000,000 g = 2204.6 lbs
100 Kg = 10,000 Dg = 100,000 g = 220.46 lbs
1 Kg = 100 Dg = 1,000 g = 2.2046 lbs

FOREIGN WEIGHTS AND MEASURES, AND THEIR AMERICAN EQUIVALENTS, AS ADOPTED BY THE U. S. TREASURY DEPARTMENT.

Almude (Portugal)—4.422 gallons.	Marc (Bolivia)—0.507 pounds.
Ardeb (Egypt)—7.6907 bushels.	Maund (India)—827 pounds.
Arobe (Paraguay)—25 pounds.	Mil (Denmark)—4.68 miles.
Arroba, liquid (Cuba, Spain, Vene- zuela)—4.263 gallons.	Milla (Nicaragua and Honduras)— 1.1499 miles.
Arshine (Russia)—28 inches.	Morgen (Prussia)—0.63 acre.
Artel (Morocco)—1.12 pounds.	Oke (Egypt)—2.7225 pounds.
Báril (Argentine Republic and Mex- ico)—20.0787 gallons.	Oke (Hungary and Wallachia)—2.5 pints.
Barrel (Spain, raisins)—100 pounds.	Pic (Egypt)—21¼ inches.
Berkovets (Russia)—361.12 pounds.	Picul (Borneo and Celebes)—135.64 pounds.
Bongkal (India)—832 grains.	Pie (Argentine Republic)—0.9478 foot.
Bouw (Sumatra)—7,096.5 square meters.	Pie (Spain)—0.91407 foot.
Bu (Japan)—0.1 inch.	Pik (Turkey)—27.9 inches.
Caffiso (Malta)—5.4 gallons.	Pood (Russia)—36.112 pounds.
Candy (India, Bombay)—529 pounds.	Quarter (Great Britain)—8.252 bushels.
Cantar (Morocco)—113 pounds.	Quarter (London, coal)—36 bushels.
Catty (China)—1.333 1-3 pounds.	Quintal (Argentine Republic)— 101.42 pounds.
Centaro (Central America)—4.2631 gallons.	Sun (Japan)—1.193 inches.
Chih (China)—14 inches.	Tael (Cochin China)—590.75 grains, Troy.
Joch (Austria-Hungary)—1,422 acres.	Tan (Japan)—0.25 acre.
Ken (Japan)—6 feet.	To (Japan)—2 pecks.
Klafter (Russia)—216 cubic feet.	Tonde (Denmark, cereals)—3.94783 bushels.
Koku (Japan)—4.9629 bushels.	Tonde (Denmark, land)—1.35 acres.
Korree (Russia)—3.5 bushels.	Tusbo (Japan)—6 feet square.
Kwan (Japan)—8.28 pounds.	Tsun (China)—1.41 inches.
Last (Belgium and Holland)—85.134 pounds.	Tunna (Sweden)—4.5 bushels.
Last (Germany)—2 metric tons (4,480 lbs.)	Tun (Sweden, land)—1.22 acres.
Last (Prussia)—112.29 bushels.	Vara (Argentine Republic)—34.1208 inches.
Last (Russian Poland)—11 3-8 bushels.	Vedro (Russia)—2.707 gallons.
Last (Spain, salt)—4,760 pounds.	Vergees (Isle of Jersey)—71.1 square rods.
Li (China)—2,115 feet.	Vlocka (Russian Poland)—41.93 acres.
Load (England, timber)—square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.	
Manzana (Costa Rica)—1 5-8 acres.	

HELP IN CASE OF ACCIDENTS

Drowning. 1. Loosen clothing, if any. 2. Empty lungs of water by laying body on its stomach, and lifting it by the middle so that the head hangs down. Jerk the body a few times. 3. Pull tongue forward, using handkerchief, or pin with string, if necessary. 4. Imitate motion of respiration by alternately compressing and expanding the lower ribs, about twenty times a minute. Alternately raising and lowering the arms from the sides up above the head will stimulate the action of the lungs. Let it be done gently but persistently. 5. Apply warmth and friction to extremities. 6. By holding tongue forward, closing the nostrils, and pressing the "Adam's apple" back (so as to close entrance to stomach), direct inflation may be tried. Take a deep breath and breathe it forcibly into the mouth of patient, compress the chest to expel the air, and repeat the operation. 7. **DON'T GIVE UP!** People have been saved after hours of patient, vigorous effort. 8. When breathing begins, get patient into a warm bed, give warm drinks, or spirits in teaspoonfuls, fresh air, and quiet.

Burns and Scalds. Cover with cooking soda and lay wet cloths over it. Whites of eggs and olive oil. Olive oil or linseed oil, plain, or mixed with chalk or whiting. Sweet or olive oil and limewater.

Lightning. Dash cold water over person struck.

Sunstroke. Loosen clothing. Get patient into shade and apply ice-cold water to head. Keep head in elevated position.

Mad Dog or Snake Bite. Tie cord tight above wound. Suck the wound and cauterize with caustic or white-hot iron at once, or cut out adjoining parts with a sharp knife. Give stimulants, as whiskey, brandy, etc.

Stings of Venomous Insects, etc. Apply weak ammonia, oil, salt water, or iodine.

Fainting. Place flat on back; allow fresh air, and sprinkle with water. Place head lower than rest of body.

Tests of Death. Hold mirror to mouth. If living, moisture will gather. Push pin into flesh. If dead the hole will remain, if alive it will close up. Place fingers in front of a strong light. If alive, they will appear red; if dead, black or dark. If a person is dead decomposition is almost sure to set in after 72 hours have elapsed. If it does not, then there is room for investigation by the physician. Do not permit burial of dead until some certain indication of death is apparent.

Cinders in the Eye. Roll soft paper up like a lamplighter, and wet the tip to remove, or use a medicine dropper to draw it out. Rub the other eye.

Fire in One's Clothing. Don't run—especially not downstairs or out-of-doors. Roll on carpet, or wrap in woollen rug or blanket. Keep the head down, so as not to inhale flame.

Fire from Kerosene. Don't use water, it will spread the flames. Dirt, sand, or flour is the best extinguisher, or smother with woollen rug, table-cloth, or carpet.

Suffocation from Inhaling Illuminating Gas. Get into the fresh air as soon as possible and lie down. Keep warm. Take ammonia—twenty drops to a tumbler of water, at frequent intervals; also, two to four drops tincture of nux vomica every hour or two for five or six hours.

RULES IN CASE OF FIRE

Crawl on the floor. The clearest air is the lowest in the room. Cover head with woollen wrap, wet if possible. Cut holes for the eyes. *Don't get excited.*

Ex-Chief Hugh Bonner, of the New York Fire Department, issued the following rules applying to houses, flats, hotels, etc.:

Familiarize yourself with the location of hall windows and natural escapes. Learn the location of exits to roofs of adjoining buildings. Learn the position of all stairways, particularly the top landing and scuttle to the roof. Should you hear cry of "fire," and columns of smoke fill the rooms, above all *keep cool*. Keep the doors of rooms shut. Open windows from the top. Wet a towel, stuff it in the mouth, breathe through it instead of nose, so as not to inhale smoke. Stand at window and get benefit of outside air. If room fills with smoke keep close to floor and crawl along by the wall to the window.

Do not jump unless the blaze behind is scorching you. Do not even then if the firemen with scaling ladders are coming up the building or are near. Never go to the roof, unless as a last resort and you know

there is escape from it to adjoining buildings. In big buildings fire always goes to the top. Do not jump through flame within a building without first covering the head with a blanket or heavy clothing and gauging the distance. Don't get excited; try to recall the means of exit, and if any firemen are in sight DON'T JUMP.

If the doors of each apartment, especially in the lower part of the house, were closed every night before the occupants retired there would not be such a rapid spread of flames.

Advice by Ex-Chief Croker.

The following rules are suggested by Edward F. Croker, ex-Chief of the New York Fire Department:

1. At the first sign of fire do not run away from it.
2. Get well acquainted with the surroundings where you live.
3. Do not resist a fireman in attempting rescue.
4. Do not be too hasty to jump from high places.
5. Fire drills should become a fixed law.
6. Everybody should learn how to use fire appliances.
7. At any cost calm the fears of little children.
8. No matter how hot the fire, bend every effort to keep calm.
9. Cleanliness in the home is an important preventive of fire.
10. In case of too much smoke try to get a wet cloth about the mouth.

ANTIDOTES FOR POISON

First. Send for a physician.

Second. Induce vomiting, by tickling throat with feather or finger. Drink hot water or strong mustard and water. Swallow sweet oil or whites of eggs.

Acids are antidotes for alkalies, and vice versa.

Arsenic. All the compounds of this substance are extremely poisonous, operate in the same manner, and require the same treatment.

Symptoms. Burning pain in stomach, with sickness and faintness, violent vomiting and retching, great thirst, hoarseness, difficulty of speech, cramps in legs, feeble, rapid, and small pulse; cold, clammy sweats; countenance expressive of great torture and anxiety; tongue and mouth parched; delirium, coma, and finally death.

Antidotes. Evacuate the contents of the stomach by emetics (mustard is the best), give milk, farinaceous or slippery elm decoction both before and after vomiting has begun. The chemical antidote is the "hydrated sesquioxide of iron," readily prepared by adding ammonia water to the common tincture of iron—both of which are found in every drug store; of the precipitate thrown down on mixing these teaspoonful doses in water may be freely given. An insoluble and therefore inert substance is formed with the arsenical compound.

Opium and its active principles, Morphine, Codeine, Narcotine, etc.

Symptoms. Giddiness, stupor, slow breathing, pupils contracted; the patient lies motionless and insensible. As the poisoning advances the features become ghastly, pulse feeble or imperceptible, and muscles relaxed.

Antidotes. Emetics such as sulphate of zinc or mustard; stimulants such as ammonia, atropine hypodermically. The patient should be continually aroused. Stomach pump should be used if solid opium has been taken, but it is of little use when morphine or laudanum has been taken.

WHEN THE BOAT OVERTURNS

Don't go out in a pleasure boat without being assured that there are life-saving buoys or cushions aboard sufficient to float all on board in case of an upset or collision. All persons should be seated before leaving shore, and no one should attempt to exchange seats in midstream or to put a foot on the edge or gunwale of the boat to exchange seats. Where the waters become rough from a sudden squall or passing steamers, never rise in the boat, but settle down as close to the bottom as possible, and keep cool until the rocking danger is passed. If overturned, a woman's skirts, if held out by her extended arms, while she uses her feet as if climbing stairs, will often hold her up while a boat may pull out from the shore and save her. A non-swimmer, by drawing his arms up to his side and pushing down with widely extended hands, while stair-climbing or treading water with his feet, may hold himself several minutes, often when a single minute means a life; or throwing out the arms, dog fashion, forward, overhand and pulling in, as if reaching for something—that may bring him in reach of help.

TOURS

The Executive Committee of the Congress has made arrangements for two trips through the United States, designated for reference and identification as the "**Short Trip**" and "**Long Trip**," and complete information in regard to them is given in the following pages. In the Portfolio in back of the book will be found a map of the United States showing by red and blue lines the two routes to be taken.

The offering of these two trips in no manner limits or diminishes the opportunity for special factory inspection or rescinds or recalls any part of the rules governing admission to factories given on page 100 of Announcement No. 3, and which read as follows:

The list (given at pages 101-117) comprises 321 different establishments, located in 144 different cities, and representing 139 different industries or branches thereof. It will, of course, be impossible for the Congress to visit all of these on excursions or set trips. However, individual members or small parties of members will be granted permission to visit, by any of the works on this list and not visited by the Congress on excursion or set trips, on presentation of the Treasurer's Receipt for membership dues. Members are therefore urged to see that Treasurer's Receipts do not pass out of their possession.

RULES GOVERNING ADMISSION TO FACTORIES.

It is understood by all the establishments on this list or its successors that all members who may ask for permission to visit works, or who may enter any works on this list because of their membership in this Congress, will *not*, under any circumstances, attempt to obtain entrance to the works of a competitor; further, that all works to be visited by members of this Congress shall have advance notice of the names, home addresses and business connections of all intending visitors, and that such works shall have the right to exclude any one on such list from such visit; members intending to visit works not contained in any excursion list should notify such works in writing and in advance of that intention and also supply their names, home addresses and business connections. Failure or omission on the part of a member to disclose himself as a competitor when making any request for permission to visit will be taken as a direct and unequivocal statement that such member is *not* a competitor, and any works from which such information is withheld has the right to insist on a positive declaration satisfactory to such works to the effect that the applicant is *not* a competitor, if it so desires.

Some of the works on this list are willing to admit competitors *provided* that satisfactory written assurance is given that such visiting member will reciprocally permit inspection of his own plant by a representative of the works to be visited. It is, therefore, suggested that members desiring to inspect competing plants should come prepared, with written authority from their principals guaranteeing such reciprocal inspection, or to have such details completed in advance in the manner prescribed below, by their principals abroad; such negotiations must *not* be conducted with the works direct, but by, and through, Prof. M. C. Whitaker, Chairman Factory Visits Committee, Columbia University, New York City, *and not otherwise*; requests for such reciprocal arrangements not passing through Professor Whitaker's hands will *not* be honored by any of the works so addressed. This rule will be strictly enforced because of the desire on the part of the officers that works that have expressed their willingness to aid the Congress shall not be burdened with needless detail and correspondence.

The "Short Trip," lasting ten days, will include Philadelphia, Pittsburgh, Niagara Falls, Detroit, Chicago, Cleveland and Boston, where it terminates.

The "Long Trip," lasting thirty-six days, proceeds to Chicago by the same route, and thence to San Francisco, returning via the Southern route, including New Orleans and other points of interest, to New York, where it terminates.

The detailed program of entertainment in the various cities which will be visited will be published at or about the opening of the Congress.

The equipment of the special train for the "Short Trip" consists of—

- One parlor smoking car.
- One 16-section sleeping car.
- Two 12-section drawing room sleeping cars.
- One 7-stateroom double drawing room car.
- One 6-stateroom observation car.

Six cars, accommodating 111 passengers.

The equipment for the "Long Trip" consists of—

- One parlor smoking car.
- Two 12-section drawing room sleeping cars.
- Two 16-section sleeping cars.
- One 10-stateroom or 7-stateroom double drawing room car.
- One 6-stateroom observation car.

Seven cars, accommodating 140 passengers.

Each train carries a limited number of staterooms (compartments) and drawing rooms. Accommodations in these will be assigned in the order in which applications are received. Additional accommodations of this kind cannot be supplied without considerably increasing the rate per person for the trip. The rate per person includes one berth (upper or lower) and the number of meals indicated on the trains, but does not include any service of any kind outside the train. Berths will be assigned in the order of the receipt of applications, the lower berths being assigned first, and thereafter the upper berths.

A *drawing room* contains two berths, one upper and one lower, and one couch, with detached private lavatory; a *stateroom* or *compartment* contains two berths, one upper and one lower, and private lavatory; in either of them the occupants can enjoy entire privacy when they so desire.

A *section* comprises one upper and one lower berth in the body of the sleeping car.

The following shows some details of the trip:

	<i>Long Trip.</i>	<i>Short Trip.</i>
Duration in days.....	36	10
Mileage	8,159	2,513
	(12,434 km.)	(3,830 km.)
Number of cities visited.....	25	7
Number of States crossed.....	22	7
Meals on train.....	61	7
Highest altitude reached.....feet, 10,240		2,165
	(3,121 m.)	(660 m.)
Rate per person (including one berth, upper or lower, and the above number of meals on the train)	*\$420	†\$83
Average cost per day.....	*\$11.66	†\$8.30

* To this amount must be added the amount needed for forty-seven meals and four nights' lodging and for the personal expenses incident to sightseeing.

† To this amount must be added the amount needed for twenty-three meals and two nights' lodging and for the personal expenses incident to sightseeing.

Additional charges for—

Drawing rooms:

One person in room.....	\$150	\$60
Two persons in room, each.....	70	30
Three persons in room, each.....	50	25

Staterooms (compartment):

One person in room.....	\$125	\$45
Two persons in room, each.....	65	25
Section (one lower and one upper berth).....	60	20

Members taking part in excursions can lodge in the trains at points where the trains stop over night, except in Chicago, San Francisco and Los Angeles.

The following tentative (and probably definite) itineraries have been provided:

THE "SHORT TRIP."

Monday, September 16. *Railroad.*
 Leave New York, N. Y., 9 A. M.:.....Pennsylvania
 Arrive Philadelphia, Pa., 11 A. M.:.....Pennsylvania

Tuesday, September 17.
 Leave Philadelphia, Pa., 1:30 A. M.:.....Pennsylvania
 Arrive Pittsburgh, Pa., 9:45 A. M.:.....Pennsylvania

Wednesday, September 18.
 Leave Pittsburgh, Pa., 11:55 P. M.:.....Pennsylvania

Thursday, September 19.
 Arrive Niagara Falls, N. Y., 9:45 A. M.:.....Pennsylvania
 Leave Niagara Falls, N. Y., 11:55 P. M.:.....Michigan Central

Friday, September 20.
 Arrive Detroit, Mich., 9:45 A. M.:.....Michigan Central
 Leave Detroit, Mich., 11:55 P. M.:.....Michigan Central

Saturday, September 21.
 Arrive Chicago, Ill., 9:45 A. M.:.....Michigan Central

Sunday, September 22.
 In and about Chicago.

Monday, September 23.
 Leave Chicago, Ill., 11:55 P. M.:...Lake Shore & Michigan Southern

Tuesday, September 24.
 Arrive Cleveland, O., 9:45 A. M.:...Lake Shore & Michigan Southern
 Leave Cleveland, O., 8:45 or
 11:55 P. M.:.....Lake Shore & Michigan Southern

Wednesday, September 25.
 Arrive Boston, Mass., 11:50 A. M. or 2:50 P. M.:...Boston & Albany
 Termination of the "Short Trip."

THE "LONG TRIP."

Monday, September 16. *Railroad.*
 Leave New York, N. Y., 9 A. M.:.....Pennsylvania
 Arrive Philadelphia, Pa., 11 A. M.:.....Pennsylvania
 Leave Philadelphia, Pa., 10 P. M.:.....Pennsylvania

Tuesday, September 17.
 Arrive Pittsburgh, Pa., 7:30 A. M.:.....Pennsylvania

Wednesday, September 18.
 Leave Pittsburgh, Pa., 10 P. M.:.....Pennsylvania

Thursday, September 19.
 Arrive Niagara Falls, N. Y., 9 A. M.....New York Central
 Leave Niagara Falls, N. Y., 10 P. M.....Michigan Central

Friday, September 20.
 Arrive Detroit, Mich., 8 A. M.....Michigan Central
 Leave Detroit, Mich., 10 P. M.....Michigan Central

Saturday, September 21.
 Arrive Chicago, Ill., 8 A. M.....Michigan Central

Sunday, September 22.
 In and about Chicago.

Monday, September 23.
 Leave Chicago, Ill., 6 P. M.....Chicago & North Western

Tuesday, September 24.
 Arrive Omaha, Neb., 12 Noon.....Chicago & North Western
 Leave Omaha, Neb., 6 P. M.....Union Pacific

Wednesday, September 25.
 Arrive Denver, Col., 12 Noon.....Union Pacific

Thursday, September 26.
 In and about Denver.

Friday, September 27.
 Leave Denver, Col., 8 A. M.....Denver & Rio Grande
 Arrive Glenwood, Col., 7 P. M.....Denver & Rio Grande

Saturday, September 28.
 Leave Glenwood, Col., 6 A. M.....Denver & Rio Grande
 Arrive Salt Lake City, Utah, 6 P. M.....Denver & Rio Grande

Sunday, September 29.
 Leave Salt Lake City, Utah,
 6 P. M.....San Pedro, Los Angeles & Salt Lake

Monday, September 30.
 Arrive Barstow, Cal., 12:15 P. M. San Pedro, Los Angeles & Salt Lake
 Leave Barstow, Cal., 12:30 P. M.....Atchison, Topeka & Santa Fe

Tuesday, October 1.
 Arrive Bakersfield, Cal., 7 A. M.....Atchison, Topeka & Santa Fe
 Leave Bakersfield, Cal., 8 P. M.....Atchison, Topeka & Santa Fe

Wednesday, October 2.
 Arrive San Francisco, Cal., 7 A. M..Atchison, Topeka & Santa Fe

Thursday, October 3.
 Leave San Francisco, Cal., 8 P. M.....Southern Pacific

Friday, October 4.
 Arrive Los Angeles, Cal., 9 A. M.....Southern Pacific

Saturday, October 5.
 In and about Los Angeles.

Sunday, October 6.
 In and about Los Angeles.

Monday, October 7.
 Leave Los Angeles, Cal., 12 Noon....Atchison, Topeka & Santa Fe

Tuesday, October 8.
 Arrive Grand Canyon, Ariz., 8 A. M. Atchison, Topeka & Santa Fe
 Leave Grand Canyon, Ariz., 7 P. M..Atchison, Topeka & Santa Fe

Wednesday, October 9.

Arrive Albuquerque, N. Mex., 6 A.M. Atchison, Topeka & Santa Fe
Leave Albuquerque, N. Mex., 8 A.M. Atchison, Topeka & Santa Fe
Arrive El Paso, Tex., 5 P.M. Atchison, Topeka & Santa Fe
Leave El Paso, Tex., 6 P.M. Atchison, Topeka & Santa Fe

Thursday, October 10.

Arrive Fort Worth, Tex., 8 A.M. Atchison, Topeka & Santa Fe
Leave Fort Worth, Tex., 7 P.M. Texas & Pacific

Friday, October 11.

Arrive Shreveport, La., 8 A.M. Texas & Pacific
Leave Shreveport, La., 6 P.M. Southern Pacific

Saturday, October 12.

Arrive Sulphur, La., 8 A.M. Southern Pacific
Leave Sulphur, La., 7 P.M. Southern Pacific

Sunday, October 13.

Arrive New Orleans, La., 8 A.M. Southern Pacific

Monday, October 14.

Leave New Orleans, La., 9 P.M. New Orleans & North Eastern

Tuesday, October 15.

Arrive Birmingham, Ala., 8 A.M. New Orleans & North Eastern
Leave Birmingham, Ala., 8 P.M. Southern

Wednesday, October 16.

Arrive Atlanta, Ga., 7 A.M. Southern
Leave Atlanta, Ga., 9 P.M. Louisville & Nashville

Thursday, October 17.

Arrive Ducktown, Tenn., 9 A.M. Louisville & Nashville
Leave Ducktown, Tenn., 12 M. Louisville & Nashville
Arrive Murphy, N. C., 3 P.M. Louisville & Nashville

Friday, October 18.

Leave Murphy, N. C., 1 A.M. Southern
Arrive Canton, N. C., 7 A.M. Southern
Leave Canton, N. C., 3 P.M. Southern
Arrive Asheville, N. C., 6 P.M. Southern

Saturday, October 19.

In and about Asheville, N. C.

Sunday, October 20.

Leave Asheville, N. C., 6 A.M. Southern
Arrive Charlotte, N. C., 1 P.M. Southern
Leave Charlotte, N. C., 3 P.M. Seaboard Air Line
Arrive Great Falls, S. C., 6 P.M. Seaboard Air Line
Leave Great Falls, S. C., 8 P.M. Seaboard Air Line
Arrive Charlotte, N. C., 11 P.M. Seaboard Air Line

Monday, October 21.

Leave Charlotte, N. C., 1 A.M. Southern
Arrive Danville, Va., 7 A.M. Southern
Leave Danville, Va., 2 P.M. Southern
Arrive Washington, D. C., 10 P.M. Southern

Tuesday, October 22.

Leave Washington, D. C., 12:30 A.M. Pennsylvania
Arrive New York, N. Y., 7 A.M. Pennsylvania

Termination of the "Long Trip."

CALENDARS FOR 1912 AND 1913

1912	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	1912	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
January	..	1	2	3	4	5	6	July	..	1	2	3	4	5	6
	7	8	9	10	11	12	13		7	8	9	10	11	12	13
	14	15	16	17	18	19	20		14	15	16	17	18	19	20
	21	22	23	24	25	26	27		21	22	23	24	25	26	27
	28	29	30	31	..	..	..		28	29	30	31	..	..	..
February	..	..	..	..	1	2	3	August	..	..	..	..	1	2	3
	4	5	6	7	8	9	10		4	5	6	7	8	9	10
	11	12	13	14	15	16	17		11	12	13	14	15	16	17
	18	19	20	21	22	23	24		18	19	20	21	22	23	24
	25	26	27	28	29	..	..		25	26	27	28	29	30	31
March	..	..	..	..	..	1	2	September	..	1	2	3	4	5	6
	3	4	5	6	7	8	9		8	9	10	11	12	13	14
	10	11	12	13	14	15	16		15	16	17	18	19	20	21
	17	18	19	20	21	22	23		22	23	24	25	26	27	28
	24	25	26	27	28	29	30		29	30	..	..	..	..	..
	31	..	..	..	..	..	..	October	..	..	1	2	3	4	5
April	..	1	2	3	4	5	6		6	7	8	9	10	11	12
	7	8	9	10	11	12	13		13	14	15	16	17	18	19
	14	15	16	17	18	19	20		20	21	22	23	24	25	26
	21	22	23	24	25	26	27		27	28	29	30	31	..	..
	28	29	30	..	..	..	..	November	..	..	..	..	1	2	3
May	..	..	..	1	2	3	4		3	4	5	6	7	8	9
	5	6	7	8	9	10	11		10	11	12	13	14	15	16
	12	13	14	15	16	17	18		17	18	19	20	21	22	23
	19	20	21	22	23	24	25		24	25	26	27	28	29	30
	26	27	28	29	30	31	..	December	..	1	2	3	4	5	6
June	..	..	..	..	..	..	1		8	9	10	11	12	13	14
	2	3	4	5	6	7	8		15	16	17	18	19	20	21
	9	10	11	12	13	14	15		22	23	24	25	26	27	28
	16	17	18	19	20	21	22		29	30	31	..	..	..	..
	23	24	25	26	27	28	29								
	30	..	..	..	..	..	..		

1913	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	1913	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
January	..	..	..	1	2	3	4	July	..	..	1	2	3	4	5
	5	6	7	8	9	10	11		6	7	8	9	10	11	12
	12	13	14	15	16	17	18		13	14	15	16	17	18	19
	19	20	21	22	23	24	25		20	21	22	23	24	25	26
	26	27	28	29	30	31	..		27	28	29	30	31	..	..
February	..	..	..	..	..	1	2	August	..	..	..	..	1	2	3
	2	3	4	5	6	7	8		3	4	5	6	7	8	9
	9	10	11	12	13	14	15		10	11	12	13	14	15	16
	16	17	18	19	20	21	22		17	18	19	20	21	22	23
	23	24	25	26	27	28	..		24	25	26	27	28	29	30
March	..	..	..	..	..	1	2	September	..	1	2	3	4	5	6
	2	3	4	5	6	7	8		7	8	9	10	11	12	13
	9	10	11	12	13	14	15		14	15	16	17	18	19	20
	16	17	18	19	20	21	22		21	22	23	24	25	26	27
	23	24	25	26	27	28	29		28	29	30	..	..	..	..
	30	31	..	..	..	..	..	October	..	..	1	2	3	4	5
April	..	1	2	3	4	5	6		5	6	7	8	9	10	11
	6	7	8	9	10	11	12		12	13	14	15	16	17	18
	13	14	15	16	17	18	19		19	20	21	22	23	24	25
	20	21	22	23	24	25	26		26	27	28	29	30	31	..
	27	28	29	30	..	..	..	November	..	..	..	..	..	1	2
May	..	..	..	..	..	1	2		2	3	4	5	6	7	8
	3	4	5	6	7	8	9		9	10	11	12	13	14	15
	10	11	12	13	14	15	16		16	17	18	19	20	21	22
	17	18	19	20	21	22	23		23	24	25	26	27	28	29
	24	25	26	27	28	29	30		30	..	..	..	..	..	..
June	..	1	2	3	4	5	6	December	..	1	2	3	4	5	6
	7	8	9	10	11	12	13		7	8	9	10	11	12	13
	14	15	16	17	18	19	20		14	15	16	17	18	19	20
	21	22	23	24	25	26	27		21	22	23	24	25	26	27
	28	29	30	..	..	..	..		28	29	30	31	..	..	..

ENGAGEMENTS

September 4

September 5

September 6

September 7

ENGAGEMENTS

September 8

September 9

September 10

September 11

Lunch at Rockefeller Institute
Subway to Columbus Circle - 59th St
Car to end of line 2nd Ave - walk
up 2nd Ave to 26th St walk E on 26th St
to 66th St
Moshler

ENGAGEMENTS

September 12

September 13

September 14

September 15

MEMORANDA

MEMORANDA

MEMORANDA

MEMORANDA

MEMORANDA

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SPECIAL TOUR
OF THE
MEMBERS
OF THE
EIGHTH INTERNATIONAL
CONGRESS OF
APPLIED CHEMISTRY
NEW YORK TO WASHINGTON
WASHINGTON TO NEW YORK
1912

ARRANGED BY THE
PENNSYLVANIA RAILROAD

251
1875



SPECIAL TOUR

OF THE

MEMBERS

OF THE

EIGHTH INTERNATIONAL

CONGRESS OF

APPLIED CHEMISTRY

NEW YORK TO WASHINGTON

SEPTEMBER 3, 1912

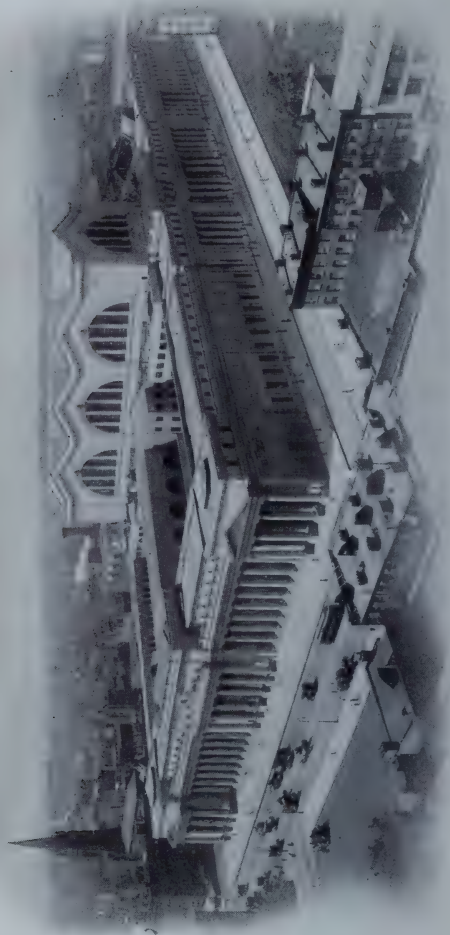
WASHINGTON TO NEW YORK

SEPTEMBER 5, 1912

UNDER THE DIRECTION OF THE

PENNSYLVANIA RAILROAD

PERSONALLY-CONDUCTED TOURIST SYSTEM



PENNSYLVANIA STATION
SEVENTH AVENUE AND THIRTY-SECOND STREET, NEW YORK

ITINERARY.

TUESDAY, SEPTEMBER 3, 1912.

PENNSYLVANIA RAILROAD.

Lv. New York (Pennsylvania Station) 4.22 P. M.
West Philadelphia..... 6.41 P. M.
Wilmington..... 7.17 P. M.
Ar. Washington (Union Station).. 9.45 P. M.
Dinner in Dining Car.
\$1.00 per plate.

WEDNESDAY, SEPTEMBER 4, 1912.

IN THE CITY OF WASHINGTON.

THURSDAY, SEPTEMBER 5, 1912.

Lv. Washington (Union Station).. 4.55 P. M.
Ar. Wilmington..... 7.25 P. M.
West Philadelphia..... 8.00 P. M.
New York (Pennsylvania Station)..... 10.25 P. M.
Dinner in Dining Car.
\$1.00 per plate.

EN ROUTE.

The Special Trains, in which the party will travel, will consist of baggage cars, standard vestibule coaches and dining cars. These cars are all-steel—in fact the whole train from engine front to rear platform is of steel, with as little wood as possible utilized even for decoration. The Pennsylvania Railroad was the pioneer railroad of the United States to operate all-steel passenger trains. The degree of safety ensured by this construction is appreciated by the careful and experienced traveler.

These Special Trains will depart from and arrive at the magnificent Pennsylvania Station, the largest railroad terminal in the United States, and the most superb from an architectural standpoint.

Situated between Seventh and Eighth Avenues, and extending from Thirty-first to Thirty-third Streets, with its wonderful tubes



STATE, WAR, AND NAVY BUILDING
WASHINGTON



PATENT OFFICE
WASHINGTON

reaching out into New Jersey under the Hudson River, and to Long Island under the East River, Pennsylvania Station represents the best railway terminal construction.

UNDER THE HUDSON RIVER.

Within a minute after leaving Pennsylvania Station, the Special Trains enter the two and a half mile-long tunnel leading under the streets of New York, the Hudson River, and the hills of Hoboken, and almost before one realizes that they have been underground, are speeding over the meadows back of Hoboken to Manhattan Transfer, where the massive electric engine, which has pulled them from Pennsylvania Station through the tubes, is detached, and powerful steam locomotives pull them away from the long platforms for the journey to Washington.

NEW YORK SUBURBAN CITIES.

Hardly has the Transfer been left before the spires and chimneys of the city of Newark loom into view. This is the principal manufacturing city of the State of New Jersey, with a population aggregating 250,000. Its factories turn out implements and machinery of every description, and products from a widely diversified scope of industry.

Within a short radius of the city of Newark are many settlements of suburban homes, whose occupants are daily commuters to and from the great city.



NEW NATIONAL MUSEUM
WASHINGTON

THROUGH EARLY BATTLEFIELDS.

Beyond come the smaller cities of Elizabeth and Rahway, and still further on, New Brunswick, the seat of Rutgers College, founded in 1771. All of these towns are not only suburban to New York, but contain workshops where an infinite variety of products are made that find a ready sale in the great city. At New Brunswick is located the plant of one of the largest manufacturers of medical and surgical supplies in the country.

South of New Brunswick the route leads over a beautiful plateau which rises on the west in hills parallel to the road. In the middle distance are seen the spires and roofs of Princeton College, founded in 1746, and one of the most celebrated institutions of learning in America. On January 3d, 1777, it was the scene of a battle between the American troops under General Washington and a portion of the British Army.

HOME OF AMERICAN POTTERY.

Trenton, the seat of government of the State of New Jersey, soon comes into view, and the gilded dome of the State Capitol is seen above the surrounding trees. Trenton contains a population of nearly 75,000 people and is chiefly famous for its potteries. Some of the finest specimens of American china are made here. On December 26th, 1776, General Washington fought the Battle of Trenton in the streets of the town.

The stream on the southern boundary of Trenton is the Delaware River, which divides



THE CAPITOL, WASHINGTON

the States of New Jersey and Pennsylvania. Villages and towns alternating with farm lands bound the road until the great manufacturing city of Philadelphia is reached.

PHILADELPHIA.

Philadelphia is the third city in America in population, containing 1,600,000 inhabitants, and covers 129 square miles of territory. It possesses many places of interest in connection with the early history of the country, notably Independence Hall, where the declaration of American independence of Great Britain was ratified in 1776; and the grave of Benjamin Franklin, printer, statesman, and philosopher. Philadelphia is the largest manufacturing city in America. It has the largest shipbuilding works (Cramp's), the largest locomotive building shops (Baldwin's), and its production of varied manufactures is extensive.

ON TOWARD THE SOUTH.

The Special Trains will not run into Broad Street Station, which is the headquarters of the Pennsylvania Railroad Company, as well as its principal terminus in the city. A stop will be made at West Philadelphia to enable those who join the party at Philadelphia to board the Special Trains.

The journey south from Philadelphia to Washington is interesting. It traverses the States of Pennsylvania, Delaware, Maryland, and the District of Columbia. The first town of importance is Chester, in Pennsylvania, noted for its manufacture of iron products and its shipbuilding.

THROUGH DELAWARE AND MARYLAND.

The next fifteen miles to the southward is Wilmington, in the State of Delaware, a city of about 80,000 people, all busy workers in the building of ship-engines, steamships, and railroad cars, or in the manufacture of fine leather, gunpowder, and other articles of trade.

Through the farming lands of Delaware and Maryland and across the great Susquehanna River the route leads to Baltimore. This is an old city, as the age of cities is counted in this new land, and an important one. It contains over 500,000 inhabitants, and has an extensive commerce in grain, agricultural products, coal, and manufactured goods. The railroad goes under the city through a series of five tunnels.

Forty miles to the south is Washington, the Capital of the United States and the most beautiful and interesting of American cities.



MOUNT VERNON



WAITING ROOM
UNION STATION, WASHINGTON

WASHINGTON.

THE CAPITAL OF THE UNITED STATES.

The City of Washington is devoted solely to the purposes for which it was built, the seat of government of the United States. It has no commerce, no manufactories, save those engaged in Government work, and no industrial enterprises except wholesale and retail stores devoted to the sale of necessary products for the inhabitants of the city.

It has a population of nearly three hundred thousand persons, the greater part of which are employed by the Government in its various Departments. The city proper covers an area

of about fourteen miles in circumference. There are about two hundred and fifty miles of streets ranging in width from eighty to one hundred and twenty feet in width, and sixty-five miles of avenues, ranging from one hundred and twenty to one hundred and sixty feet in width.

All of them are kept scrupulously clean by machinery, and it is a delight at any season of the year to walk or drive through the city, with its shaded streets and beautiful squares adorned with trees, flowers and statuary, and its stately public buildings and picturesque private residences.

The location of the National Capital on its present site was accomplished in the early days following the War of Revolution, only after a bitter struggle between six of the principal cities then existing in the new country.

It was not until 1790 that Congress finally passed the Act locating the city on the banks of the Potomac near Mt. Vernon, which was



TREASURY BUILDING
WASHINGTON

then the home of President Washington, after whom the new city was later named.

President Washington selected Pierre L'Enfant, a French engineer, to make a plan for the new city, and later, by direction the Government, L'Enfant laid out the city upon the plan now in evidence as one drives about the city. The new public buildings were first occupied for Government use in 1800, the Capitol being one of the first erected.

PRESS OF
ALLEN, LANE & SCOTT,
PHILADELPHIA.



Subway to 33° S

34 " S surface bar
to Pennsylvania
before





**PENNSYLVANIA RAILROAD
TOURS**

ACCOUNT

**FOREIGN DELEGATES'
INTERNATIONAL CONGRESS OF
APPLIED CHEMISTRY
1912**

(STARTING FROM NEW YORK)

TOUR "A"
Shown by red line.
PHILADELPHIA, PA., PITTSBURGH, PA., NIAGARA FALLS, N.Y., DETROIT, MICH., CHICAGO, ILL., OMAHA, NEB., DENVER, COLO., GLENWOOD, COLO., SALT LAKE CITY, UTAH, BAKERSFIELD, CAL., SAN FRANCISCO, CAL., LOS ANGELES, CAL., GRAND CANYON, ARIZ., FORT WORTH, TEX., SHREVEPORT, LA., SULLIVAN, LA., NEW ORLEANS, LA., BIRMINGHAM, ALA., ATLANTA, GA., DUCKTOWN, TENN., MURPHY, N. C., CANTON, N. C., ASHEVILLE, N. C., CHARLOTTE, N. C., GREAT FALLS, N. C., DANVILLE, VA., AND WASHINGTON, D. C.

TOUR "B"
Shown by blue line.
PHILADELPHIA, PA., PITTSBURGH, PA., NIAGARA FALLS, N.Y., DETROIT, MICH., CHICAGO, ILL., CLEVELAND, O., AND BOSTON, MASS.



MAP
OF
CITY OF NEW YORK

TOURS
Map Showing Routes of
"Short" and "Long" Trips

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International Congress of
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York, 1912
Handbook of City of
New York

